LPRD Handbook

License Plate Recognition Data

End User License Agreement
Server Installation Guide
Client Installation Guide
Replicator Guide
Agency User and Administration Manual

SPAWAR Systems Center, Atlantic
2010

LPRD Handbook

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Points of Contact

Space and Naval Warfare Systems Center, Atlantic (SPAWAR)
Joint Information Sharing Branch

P.O. Box 190022
North Charleston, SC 29419-9022
(b)(6)
(843) 218-4528

Scientific Research Corporation (SRC)
1101 Remount Road, Suite 500
North Charleston, SC 29406
(843) 747-8766 (phone)
(843) 747-7702 (fax)

SRC Program Managers and Team Members: (b)(4), (b)(6)
(b)(4), (b)(6)

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LPRD Server Installation Guide

I. Downloading JDK and GlassFish

A. Installing JDK

1. Go to:

   http://java.sun.com/javase/downloads/index.jsp

2. Scroll down to the Java SE downloads in detail. Click on the "Download" button on the right hand side of the JDK 6 Update 20 JDK.

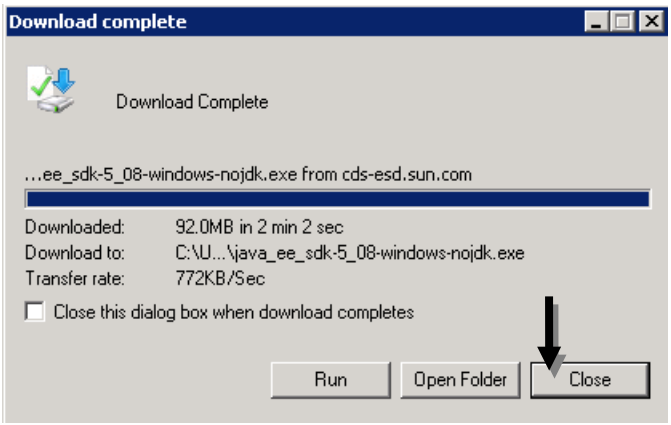
Java Platform, Standard Edition
JDK 6 Update 20 (JDK or JRE)
This release contains critical security updates to the Java runtime. Please update now to take advantage of these enhancements. » Learn more
What Java Do I Need? You must have a copy of the JRE (Java Runtime Environment) on your system to run Java applications and applets. To develop Java applications and applets, you need the JDK (Java Development Kit), which includes the JRE.
NOTE: The Firefox 3.6 browser requires Java SE 6 Update 10 or later. Otherwise, Java-based web applications will not work.
Download JDK
Docs
Download JRE
Docs

3. Select Windows from the first platform dropdown menu (if not preselected), check the agreement box (if you agree), leave the second dropdown menu at 1.5 Mbps, and click download.

Download Java SE Development Kit 6u20
Platform:
Windows
Language:
Multi-language
By selecting 'Download' or 'Continue' below, you hereby accept the terms and conditions of the Java SE Development Kit 6u20 License Agreement.
Use Sun Download Manager (Learn More)
Download »
File Size: 76.67 MB
Est. Download Time: 7 min
1.5 Mbps

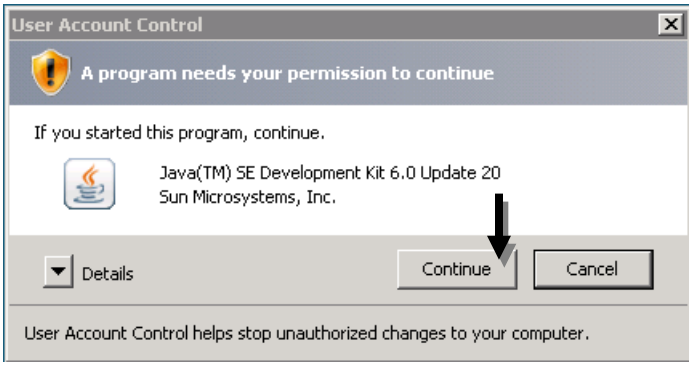
4. Click underlined file name on the next screen and continue the process of saving the .exe file to either the desktop or a familiar file saving location.

5. When the 'Download Complete' window appears, click 'Close'.



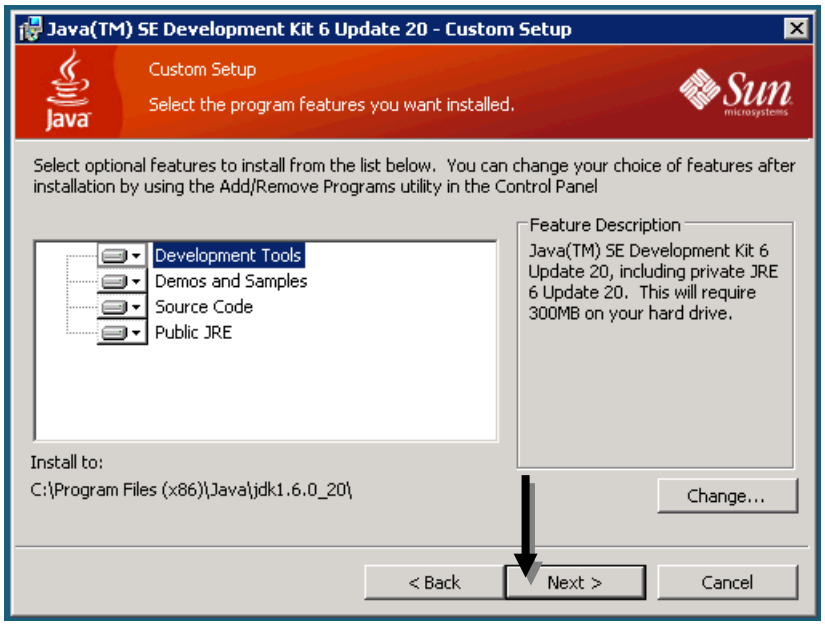
6. Double click on the JDK icon wherever the file was saved in order to complete the installation.

7. This action may prompt a box like the following to appear. Click 'Continue'.

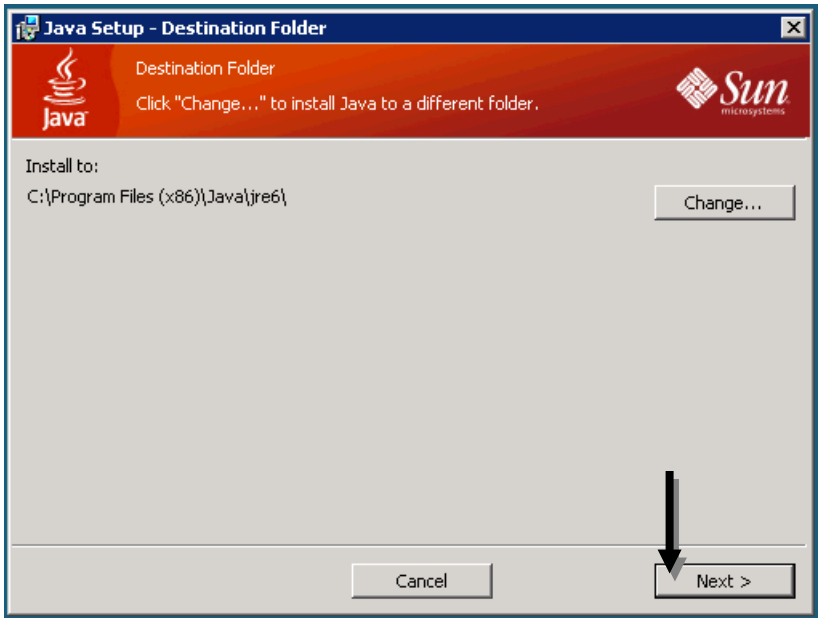

User Account Control
A program needs your permission to continue
If you started this program, continue.
Java(TM) SE Development Kit 6.0 Update 20
Sun Microsystems, Inc.
Details
Continue
Cancel
User Account Control helps stop unauthorized changes to your computer.

8. The License Agreement should appear next. Click 'Accept', if you do.

9. A Custom Setup screen should appear next. Click 'Next', as you can 'change your choice of features after installation by using the Add/Remove Programs utility in the Control Panel'.


Java(TM) SE Development Kit 6 Update 20 - Custom Setup
Custom Setup
Select the program features you want installed.
Sun
Select optional features to install from the list below. You can change your choice of features after installation by using the Add/Remove Programs utility in the Control Panel
Development Tools
Demos and Samples
Source Code
Public JRE
Feature Description
Java(TM) SE Development Kit 6 Update 20, including private JRE 6 Update 20. This will require 300MB on your hard drive.
Install to:
C:\Program Files (x86)\Java\jdk1.6.0_20\
Change...
< Back
Next >
Cancel

10. It will continue downloading, and should ask for an installation directory (or destination folder to install to). For JDK installation, it can go into the prescribed folder (something to the effect of C:\Program Files (x86)\Java\jre6\). Click 'Next'.



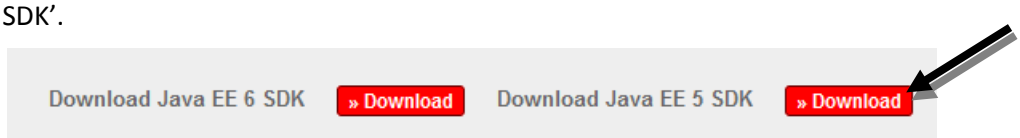
11. It will continue installing and should conclude with a completion window saying that it successfully installed. Click 'Finish'.

B. Installing GlassFish

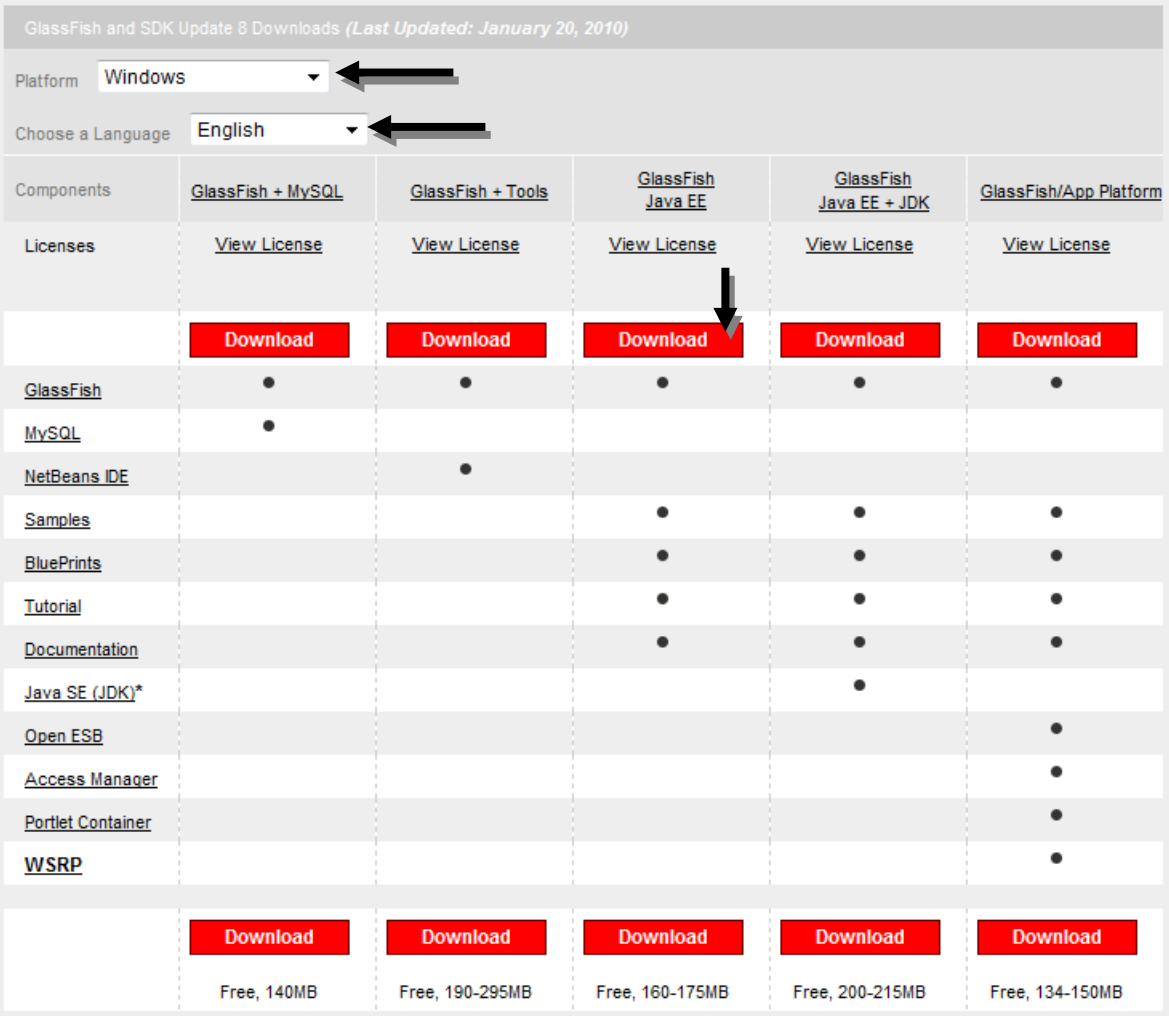
1. Go to:

   http://java.sun.com/javaee/

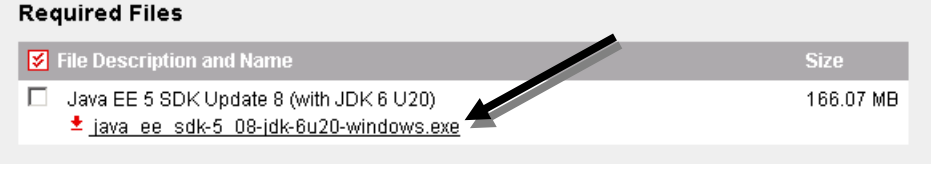
2. Scroll down to the JDK 6 Update 20 with Java EE box. Click the 'Download' button for 'Java EE 5 SDK'.



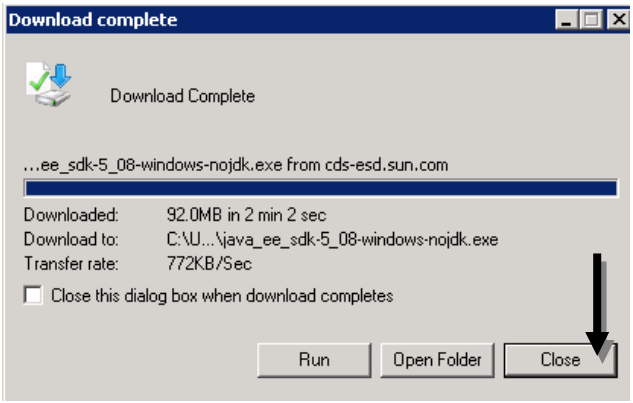
3. Select the appropriate Platform and Language needed for your download and also the 'Download' button for the 'GlassFish Java EE' on the next screen.



4. Click on the .exe file and choose 'Save' when prompted by a download window. Save the .exe file to either the desktop or a familiar file saving location.

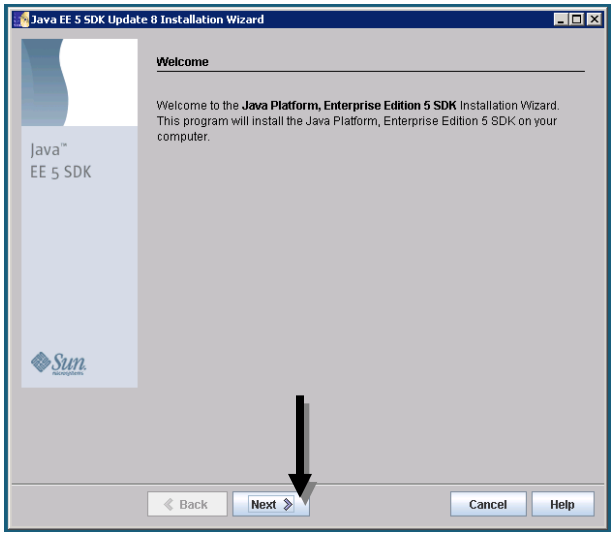


5. When the ‘Download Complete’ window appears, click ‘Close’.



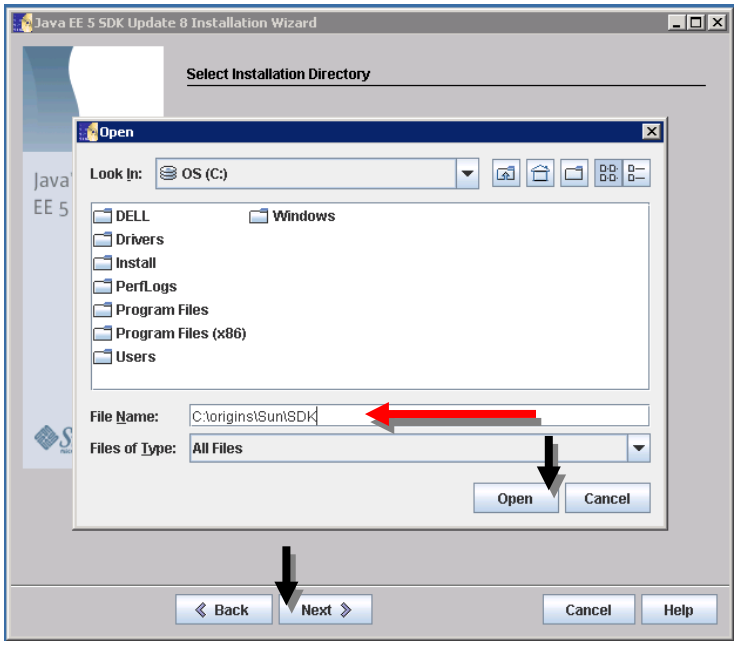
6. Double click on the Java EE icon wherever the file was saved in order to complete the installation. Choose ‘Run’ when prompted with the question “Are you sure you want to run this software?”

7. This should bring up the Installation Window. Click ‘Next’.


Java EE 5 SDK Update 8 Installation Wizard
Welcome
Welcome to the Java Platform, Enterprise Edition 5 SDK Installation Wizard. This program will install the Java Platform, Enterprise Edition 5 SDK on your computer.
Java™
EE 5 SDK
Sun
Back
Next
Cancel
Help

   a. Agree with the terms of the license, if you do, and click ‘Next’.

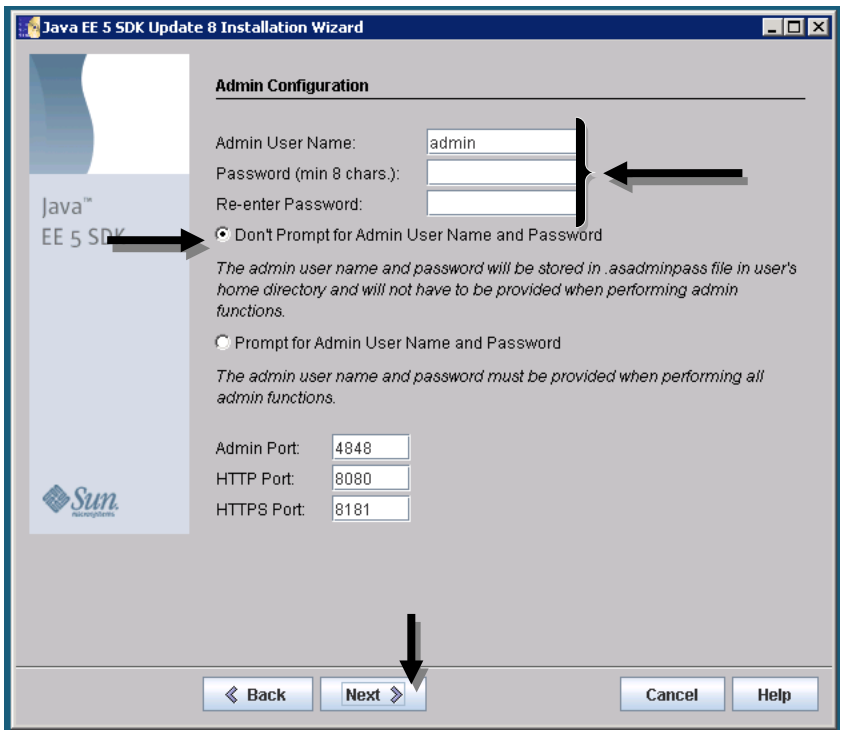
b. The next window will allow a selection of the installation directory. Change the installation directory from C:\Sun\SDK to C:\origins\Sun\SDK and click 'Open'. Click 'Next'.



c. When prompted with the following window, click 'Create Directory'.

Create new directory?
The directory "C:\origins\Sun\SDK" does not exist.
Do you want to create it now or choose another directory?
Create Directory
Choose New

d. The following screen should appear:


Java EE 5 SDK Update 8 Installation Wizard
Admin Configuration
Admin User Name:
admin
Password (min 8 chars.):
Re-enter Password:
Don't Prompt for Admin User Name and Password
The admin user name and password will be stored in .asadminpass file in user's home directory and will not have to be provided when performing admin functions.
Prompt for Admin User Name and Password
The admin user name and password must be provided when performing all admin functions.
Admin Port:
4848
HTTP Port:
8080
HTTPS Port:
8181
Java™
EE 5 SDK
Sun
Back
Next
Cancel
Help

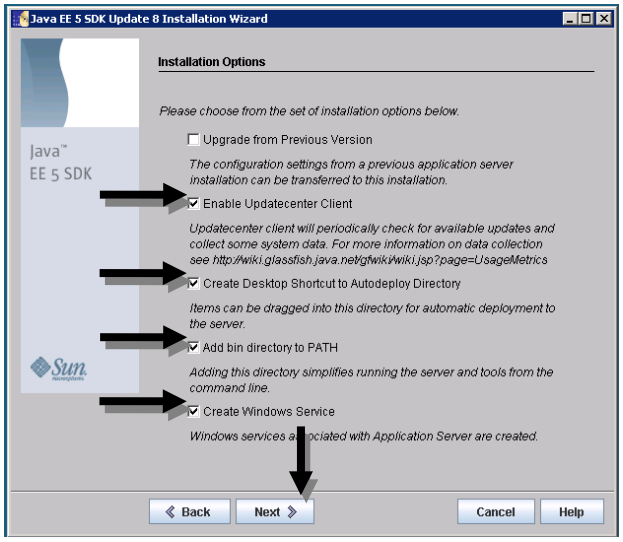
i. Choose an admin password (min 8 characters). This will be referred in this installation guide as your 'GlassFish Administrator Password for domain1'. MAKE SURE THESE CREDENTIALS ARE REMEMBERED.

ii. Select 'Don't Prompt for Admin User Name and Password'.

iii. The Admin, HTTP, HTTPS ports should be left at the default (4848, 8080, 8181).

iv. Click 'Next'.

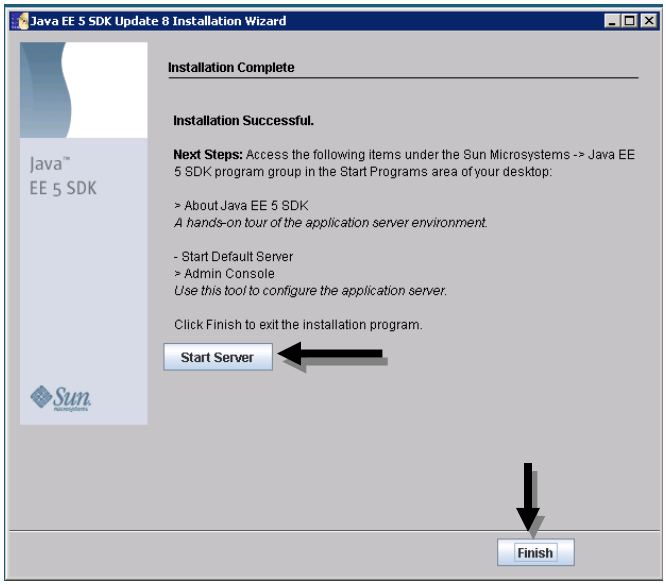
e. The next screen should have the last 4 boxes checked ('Enable Updatecenter Client', 'Create Desktop Shortcut to Autodeploy Directory', 'Add bin directory to PATH', 'Create Windows Service'). Click 'Next'.


Java EE 5 SDK Update 8 Installation Wizard
Installation Options
Please choose from the set of installation options below.
Java™ EE 5 SDK
Upgrade from Previous Version
The configuration settings from a previous application server installation can be transferred to this installation.
Enable Updatecenter Client
Updatecenter client will periodically check for available updates and collect some system data. For more information on data collection see http://wiki.glassfish.java.net/gfwiki/wiki.jsp?page=UsageMetrics
Create Desktop Shortcut to Autodeploy Directory
Items can be dragged into this directory for automatic deployment to the server.
Add bin directory to PATH
Adding this directory simplifies running the server and tools from the command line.
Create Windows Service
Windows services associated with Application Server are created.
Back
Next
Cancel
Help

f. Click 'Install Now' on the next screen which will start the installation process.

g. Optionally select 'Skip Registration' once installation has been completed and click 'Next'.

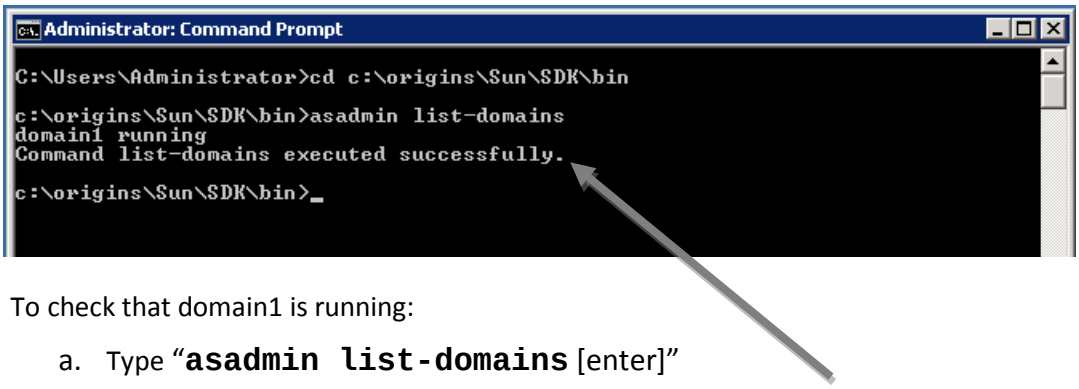
h. The next screen will show that the installation is complete. Click 'Start Server'. This should bring up a 'Startup Complete' window. Click 'Ok' to exit out of this small window. Click 'Finish' on the 'Installation Complete' screen.


Java EE 5 SDK Update 8 Installation Wizard
Installation Complete
Installation Successful.
Next Steps: Access the following items under the Sun Microsystems -> Java EE 5 SDK program group in the Start Programs area of your desktop:
Java™ EE 5 SDK
> About Java EE 5 SDK
A hands-on tour of the application server environment.
- Start Default Server
> Admin Console
Use this tool to configure the application server.
Click Finish to exit the installation program.
Start Server
Finish

II. Creating a Second GlassFish Domain

1. Open Windows Command Prompt via Start->Run->'cmd'
2. Change directory down to the GlassFish directory by typing:

   `cd c:\origins\Sun\SDK\bin` [enter]

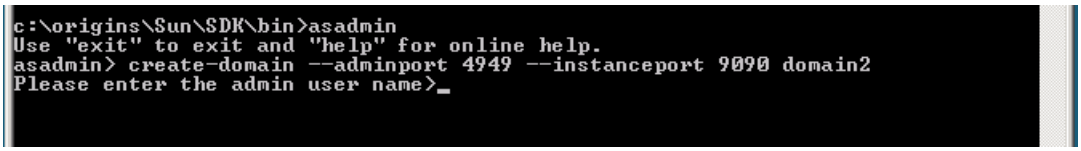


3. To check that domain1 is running:
   a. Type "**`asadmin list-domains`** [enter]"
   b. If domain 1 is operating properly, it should say "domain1 running".
4. To create a new domain:
   a. Type:

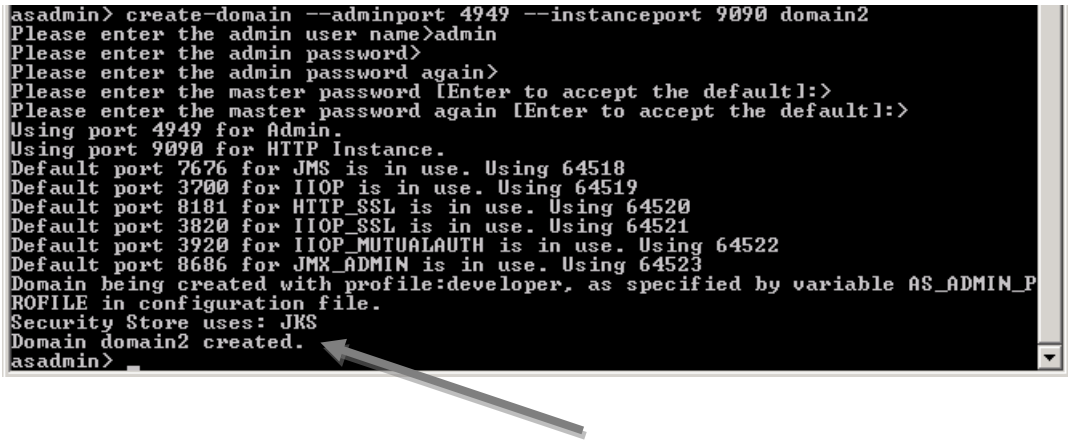
      `asadmin` [enter]

      And, then type:

      `create-domain --adminport 4949 --instanceport 9090 domain2` [enter]


c:\origins\Sun\SDK\bin>asadmin
Use "exit" to exit and "help" for online help.
asadmin> create-domain --adminport 4949 --instanceport 9090 domain2
Please enter the admin user name>

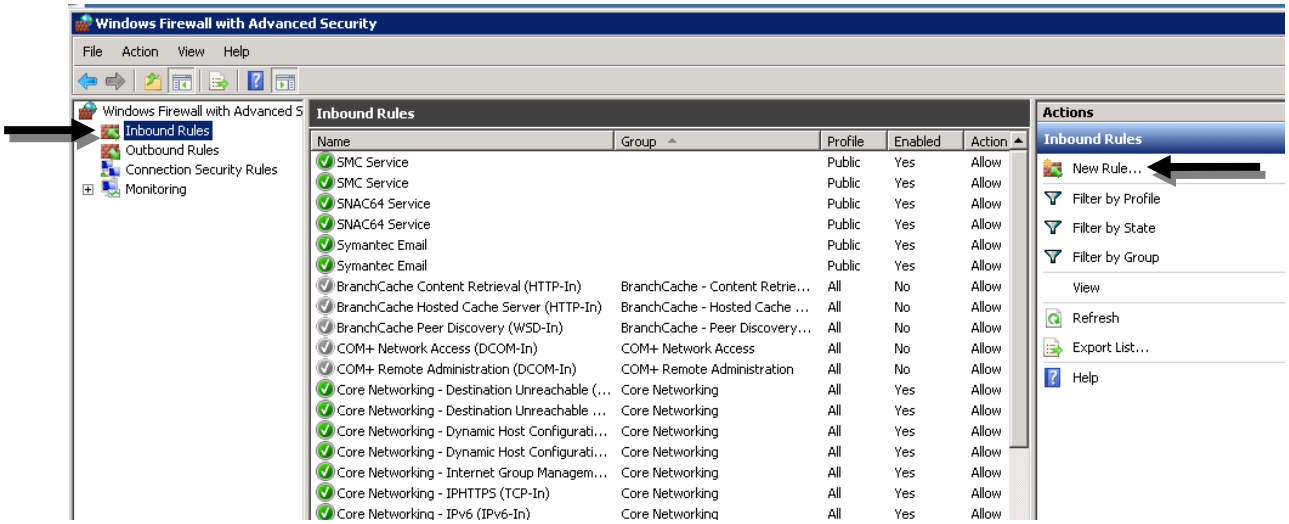
   b. It will ask for admin username and password. For admin we suggest 'admin'. Enter the credentials of your personal choice followed by enter (we suggest the same credentials as were created in domain1). These credentials will be referred to in this installation guide as your 'GlassFish Admin Password for domain2'. <u>MAKE SURE YOU REMEMBER THESE CREDENTIALS AS THEY WILL BE NEEDED LATER.</u>


asadmin> create-domain --adminport 4949 --instanceport 9090 domain2
Please enter the admin user name>admin
Please enter the admin password>
Please enter the admin password again>
Please enter the master password [Enter to accept the default]:>
Please enter the master password again [Enter to accept the default]:>
Using port 4949 for Admin.
Using port 9090 for HTTP Instance.
Default port 7676 for JMS is in use. Using 64518
Default port 3700 for IIOP is in use. Using 64519
Default port 8181 for HTTP_SSL is in use. Using 64520
Default port 3820 for IIOP_SSL is in use. Using 64521
Default port 3920 for IIOP_MUTUALAUTH is in use. Using 64522
Default port 8686 for JMX_ADMIN is in use. Using 64523
Domain being created with profile:developer, as specified by variable AS_ADMIN_P
ROFILE in configuration file.
Security Store uses: JKS
Domain domain2 created.
asadmin>

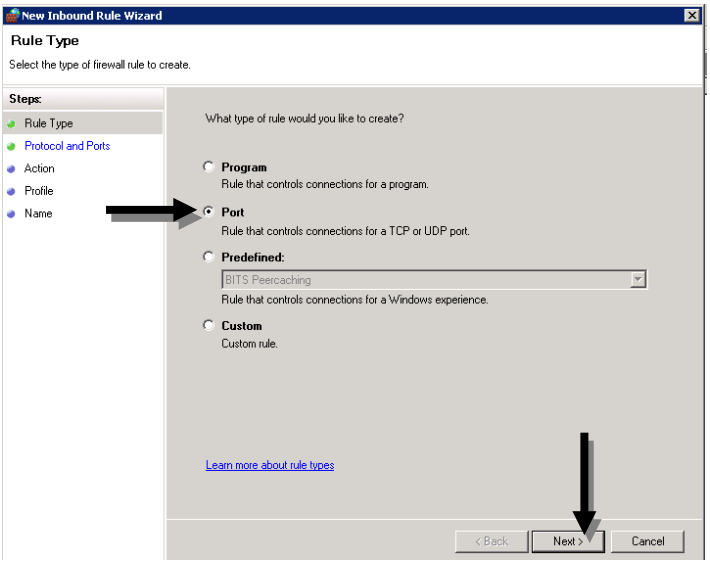
c. If successful, the screen should have the text “Domain domain2 created”. If unsuccessful, see Troubleshooting Tips.

III. Firewall Setup

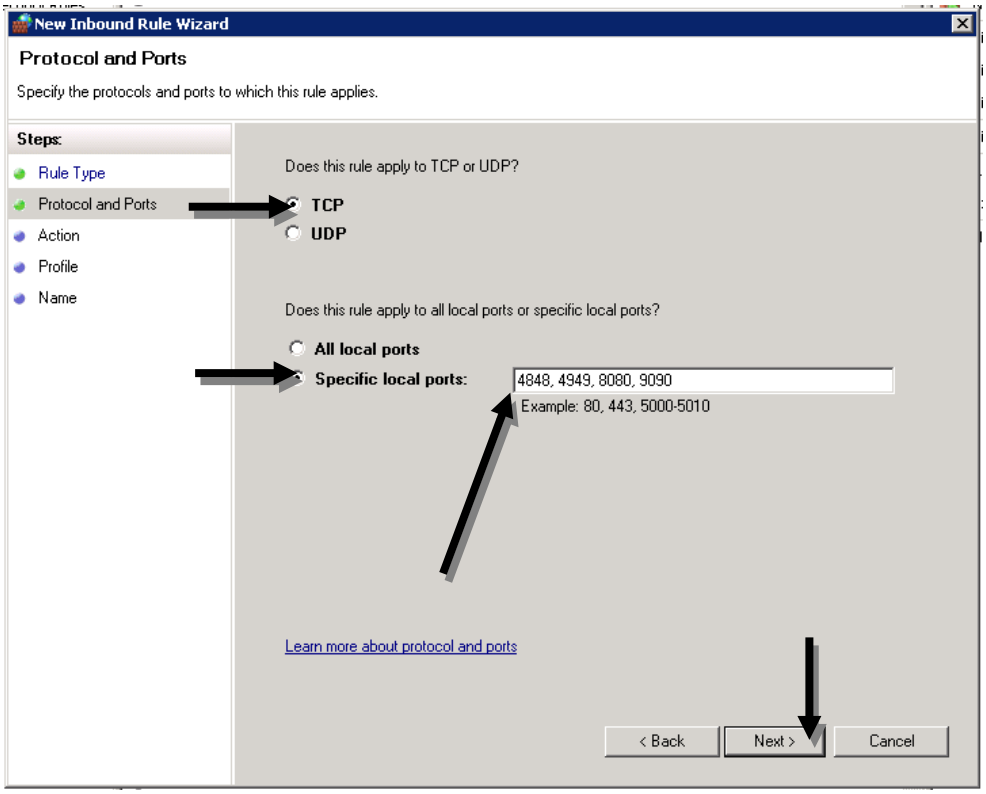
1. Go to Start->Administrative Tools->Windows Firewall with Advanced Security->Inbound Rules (found on the left sidebar)-> New Rule (found on the right sidebar)


Windows Firewall with Advanced Security
File Action View Help
Windows Firewall with Advanced S
Inbound Rules
Outbound Rules
Connection Security Rules
Monitoring
Inbound Rules
Name Group Profile Enabled Action
SMC Service Public Yes Allow
SMC Service Public Yes Allow
SNAC64 Service Public Yes Allow
SNAC64 Service Public Yes Allow
Symantec Email Public Yes Allow
Symantec Email Public Yes Allow
BranchCache Content Retrieval (HTTP-In) BranchCache - Content Retrie... All No Allow
BranchCache Hosted Cache Server (HTTP-In) BranchCache - Hosted Cache ... All No Allow
BranchCache Peer Discovery (WSD-In) BranchCache - Peer Discovery... All No Allow
COM+ Network Access (DCOM-In) COM+ Network Access All No Allow
COM+ Remote Administration (DCOM-In) COM+ Remote Administration All No Allow
Core Networking - Destination Unreachable (... Core Networking All Yes Allow
Core Networking - Destination Unreachable ... Core Networking All Yes Allow
Core Networking - Dynamic Host Configurati... Core Networking All Yes Allow
Core Networking - Dynamic Host Configurati... Core Networking All Yes Allow
Core Networking - Internet Group Managem... Core Networking All Yes Allow
Core Networking - IPHTTPS (TCP-In) Core Networking All Yes Allow
Core Networking - IPv6 (IPv6-In) Core Networking All Yes Allow
Actions
Inbound Rules
New Rule...
Filter by Profile
Filter by State
Filter by Group
View
Refresh
Export List...
Help

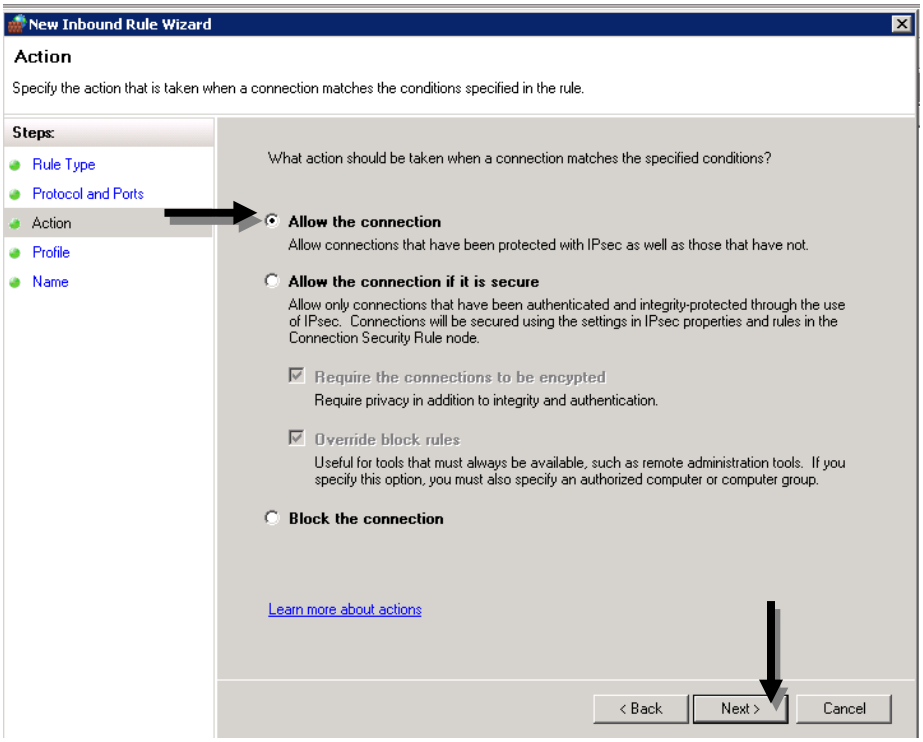
2. Select ‘Port’ and click ‘Next’.



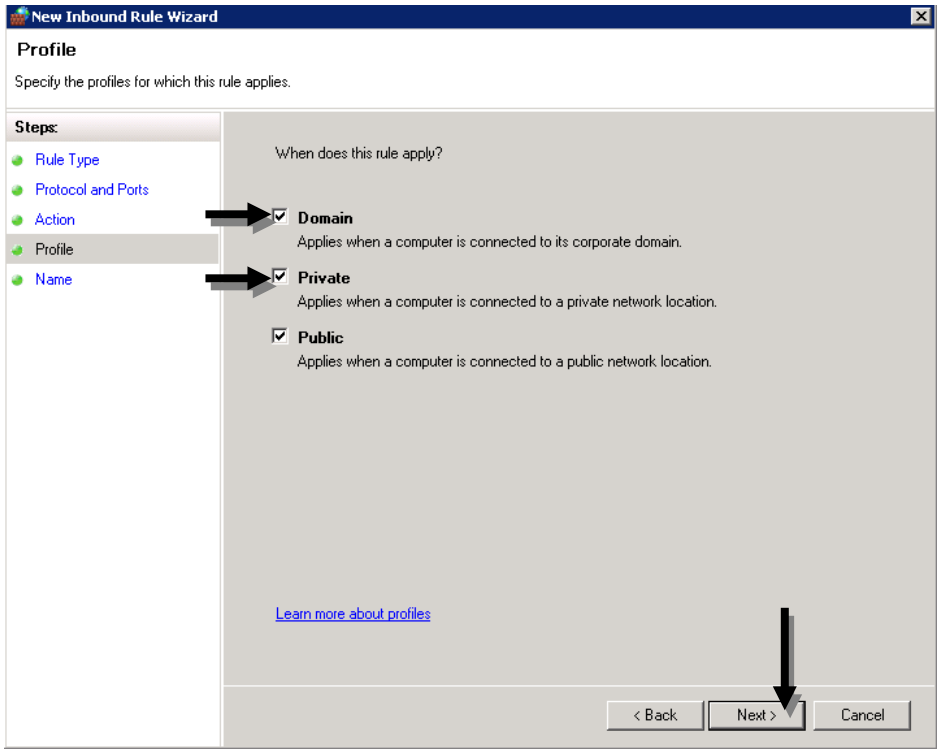
3. Select ‘TCP’ and ‘Specific local ports’. In the blank beside ‘Specific local ports’ type **8080,9090**. Optionally, if you would like to administer the machine remotely, also include 4848,4949. **Warning: Be sure the server is not directly connected to the Internet. It must be on a private network only accessible through VPN (or equivalent) ** Click ‘Next’.



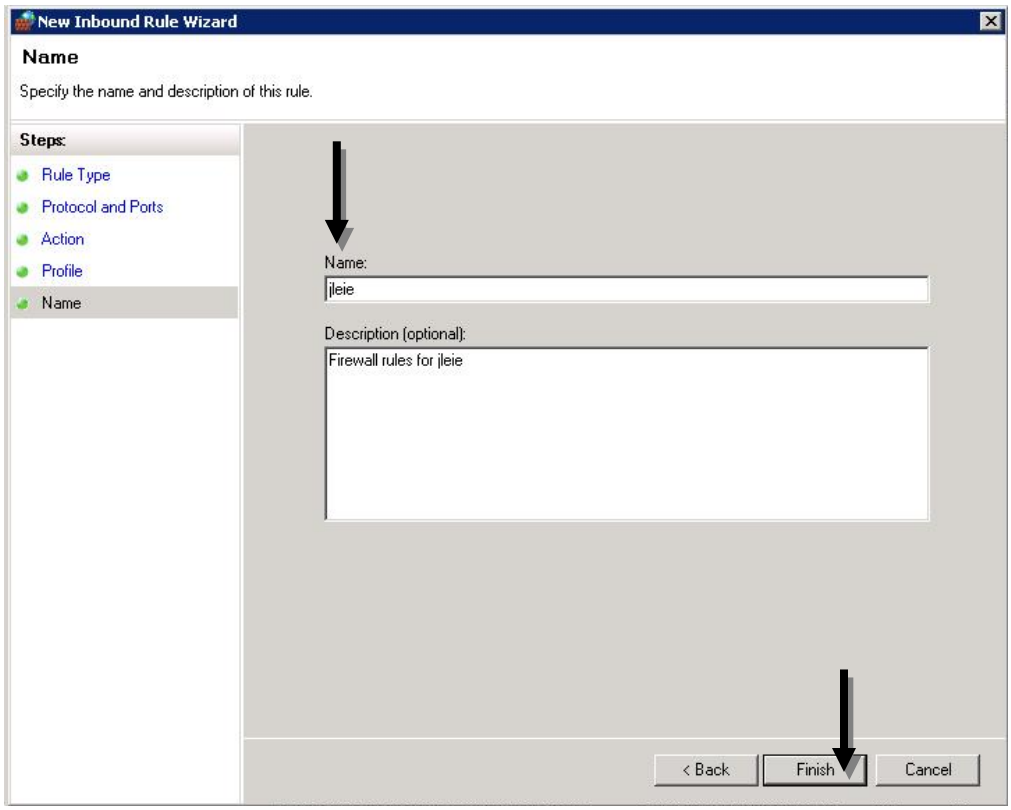
4. Select ‘Allow the Connection’.


New Inbound Rule Wizard
Action
Specify the action that is taken when a connection matches the conditions specified in the rule.
Steps:
Rule Type
Protocol and Ports
Action
Profile
Name
What action should be taken when a connection matches the specified conditions?
Allow the connection
Allow connections that have been protected with IPsec as well as those that have not.
Allow the connection if it is secure
Allow only connections that have been authenticated and integrity-protected through the use of IPsec. Connections will be secured using the settings in IPsec properties and rules in the Connection Security Rule node.
Require the connections to be encypted
Require privacy in addition to integrity and authentication.
Override block rules
Useful for tools that must always be available, such as remote administration tools. If you specify this option, you must also specify an authorized computer or computer group.
Block the connection
Learn more about actions
< Back
Next >
Cancel

5. Mark ‘Domain’ and ‘Private’. The server should not be connected to a public network. Click ‘Next’.



6. On the next screen, type the name as ‘jleie’. For the description, write something to the effect of ‘Firewall rules for jleie’. Click ‘Finish’.

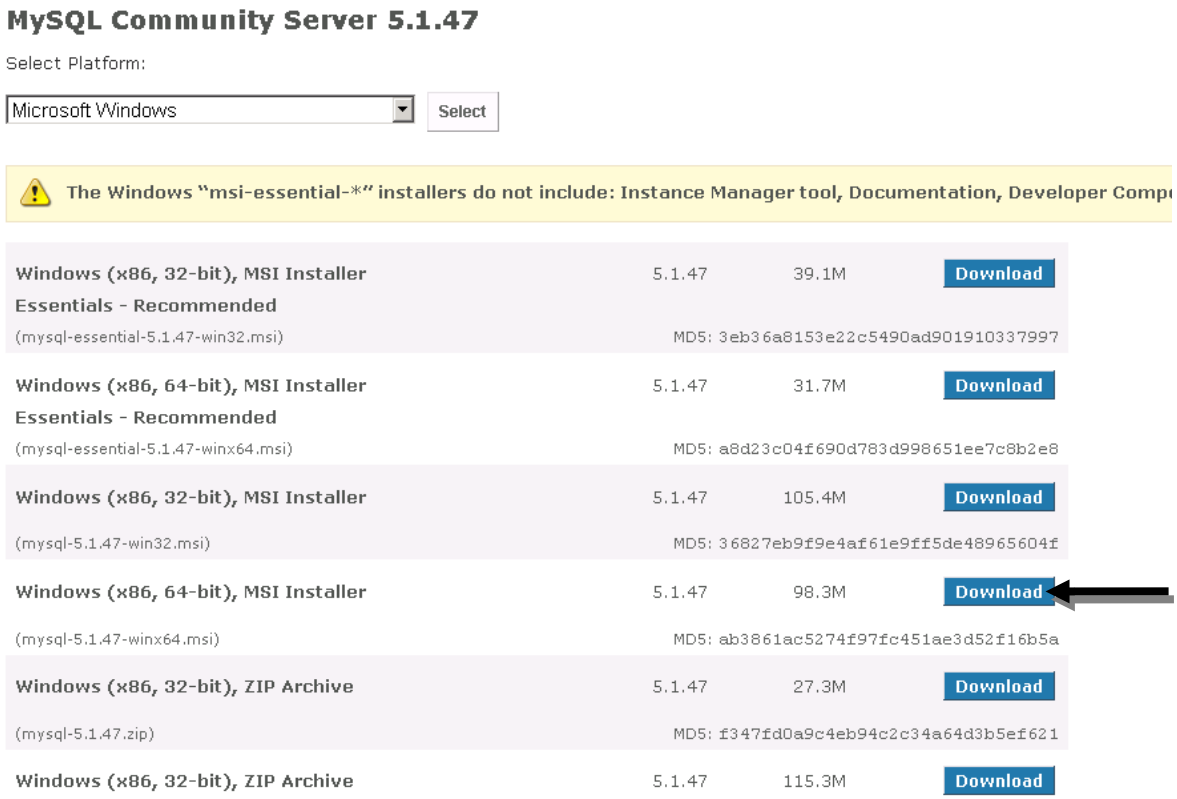


IV. Installing MySQL

1. Open your browser and go to:

   http://www.mysql.com/downloads/mysql/

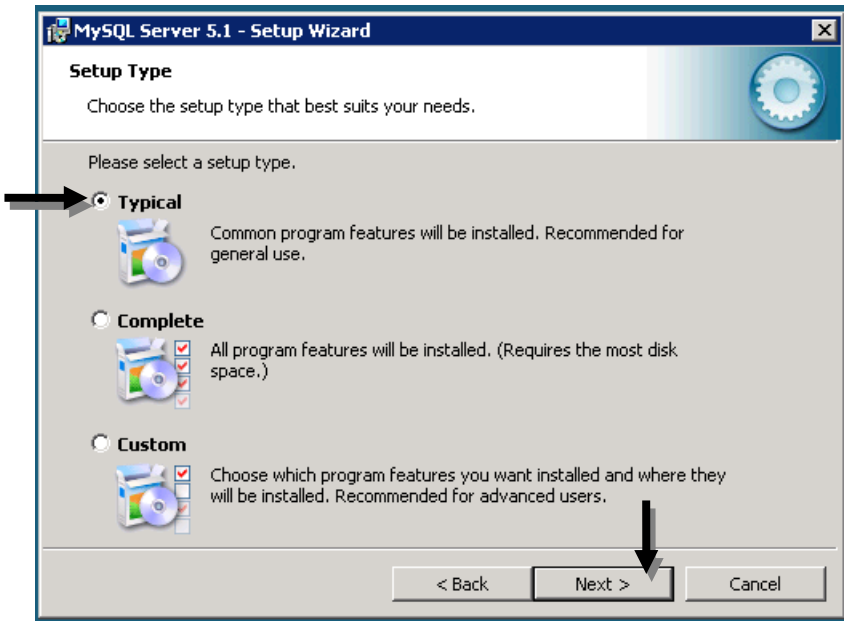
2. Click the 'Download' button on Windows x86, 64-bit), MSI Installer.


MySQL Community Server 5.1.47
Select Platform:
Microsoft Windows
Select
The Windows "msi-essential-*" installers do not include: Instance Manager tool, Documentation, Developer Compo
Windows (x86, 32-bit), MSI Installer 5.1.47 39.1M Download
Essentials - Recommended
(mysql-essential-5.1.47-win32.msi) MD5: 3eb36a8153e22c5490ad901910337997
Windows (x86, 64-bit), MSI Installer 5.1.47 31.7M Download
Essentials - Recommended
(mysql-essential-5.1.47-winx64.msi) MD5: a8d23c04f690d783d998651ee7c8b2e8
Windows (x86, 32-bit), MSI Installer 5.1.47 105.4M Download
(mysql-5.1.47-win32.msi) MD5: 36827eb9f9e4af61e9ff5de48965604f
Windows (x86, 64-bit), MSI Installer 5.1.47 98.3M Download
(mysql-5.1.47-winx64.msi) MD5: ab3861ac5274f97fc451ae3d52f16b5a
Windows (x86, 32-bit), ZIP Archive 5.1.47 27.3M Download
(mysql-5.1.47.zip) MD5: f347fd0a9c4eb94c2c34a64d3b5ef621
Windows (x86, 32-bit), ZIP Archive 5.1.47 115.3M Download

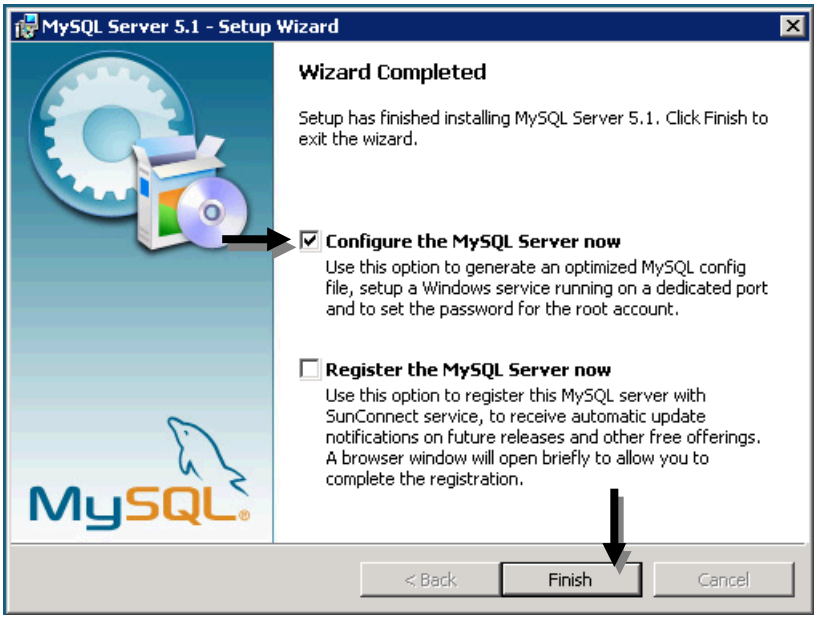
3. Click on the 'No thanks, just take me to the downloads!'. This will take you to the 'Mirrors in' section. Select the HTTP that is closest to your location.
4. Save the .msi file either to your desktop or a familiar and easily accessed file downloads location.
5. After having finished downloading the file, double click on the icon to start the installation and choose 'Run' when prompted with an "Open File" window.

6. When the Setup Wizard starts, click 'Next'.

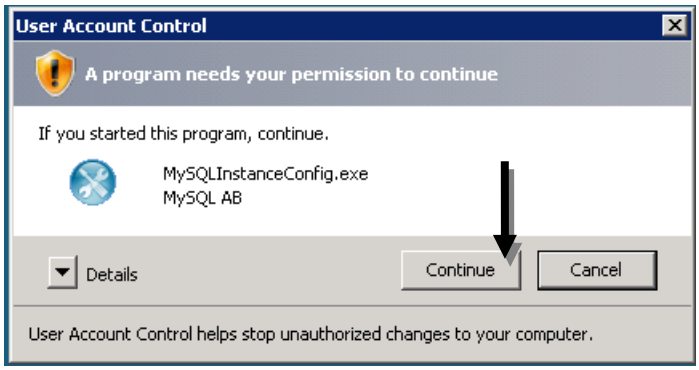
7. The next screen will have Setup Type options. Choose 'Typical' (first option).


MySQL Server 5.1 - Setup Wizard
Setup Type
Choose the setup type that best suits your needs.
Please select a setup type.
Typical
Common program features will be installed. Recommended for general use.
Complete
All program features will be installed. (Requires the most disk space.)
Custom
Choose which program features you want installed and where they will be installed. Recommended for advanced users.
< Back
Next >
Cancel

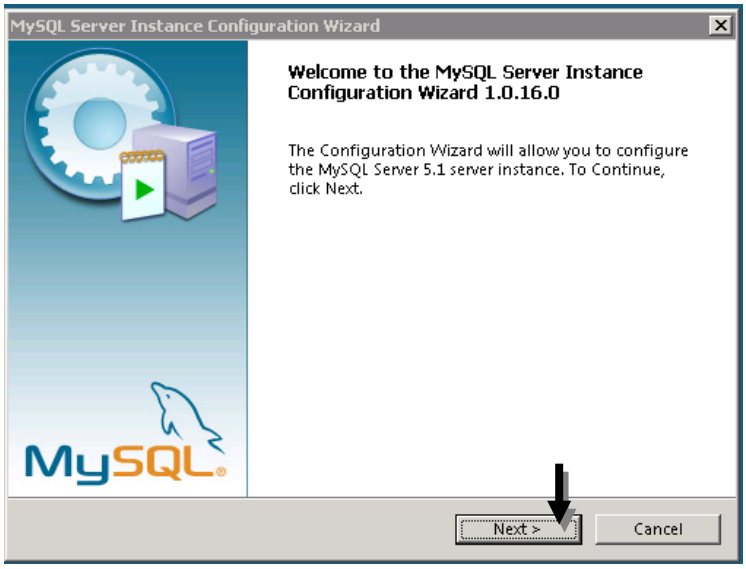
8. Click 'Install' on the next screen. (After clicking, you may have to click 'Continue' if a User Account Control box pops up).
9. On the MySQL Enterprise screen that will pop up next, click 'Next', and then 'Next' again on the following screen.
10. Select only the 'Configure the MySQL Server now' option and click 'Finish'.


MySQL Server 5.1 - Setup Wizard
Wizard Completed
Setup has finished installing MySQL Server 5.1. Click Finish to exit the wizard.
Configure the MySQL Server now
Use this option to generate an optimized MySQL config file, setup a Windows service running on a dedicated port and to set the password for the root account.
Register the MySQL Server now
Use this option to register this MySQL server with SunConnect service, to receive automatic update notifications on future releases and other free offerings. A browser window will open briefly to allow you to complete the registration.
MySQL
< Back
Finish
Cancel

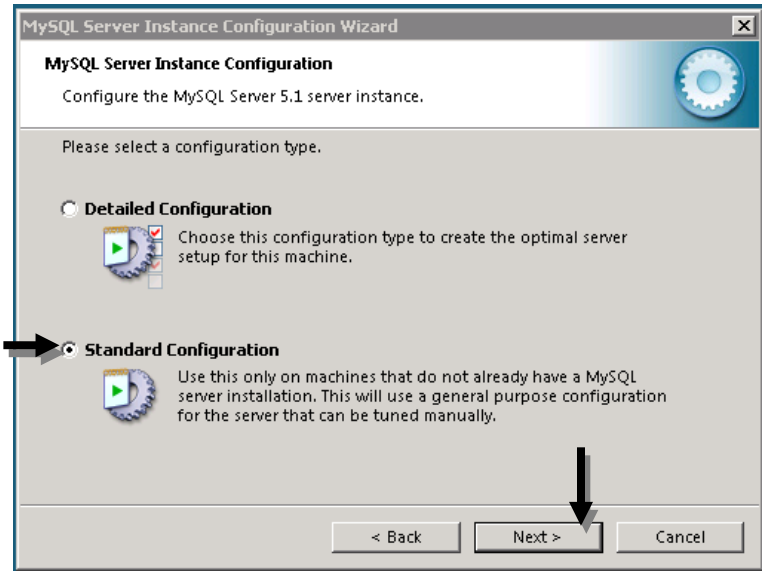
11. Click ‘Continue’ on the “User Account Control” window that may pop up.



12. Click ‘Next’ on the “MySQL Server Instance Configuration Wizard” window.


MySQL Server Instance Configuration Wizard
Welcome to the MySQL Server Instance Configuration Wizard 1.0.16.0
The Configuration Wizard will allow you to configure the MySQL Server 5.1 server instance. To Continue, click Next.
MySQL
Next >
Cancel

13. Select ‘Standard Configuration’ on the next screen with Configuration Type options. Click ‘Next’.


MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.1 server instance.
Please select a configuration type.
Detailed Configuration
Choose this configuration type to create the optimal server setup for this machine.
Standard Configuration
Use this only on machines that do not already have a MySQL server installation. This will use a general purpose configuration for the server that can be tuned manually.
< Back
Next >
Cancel

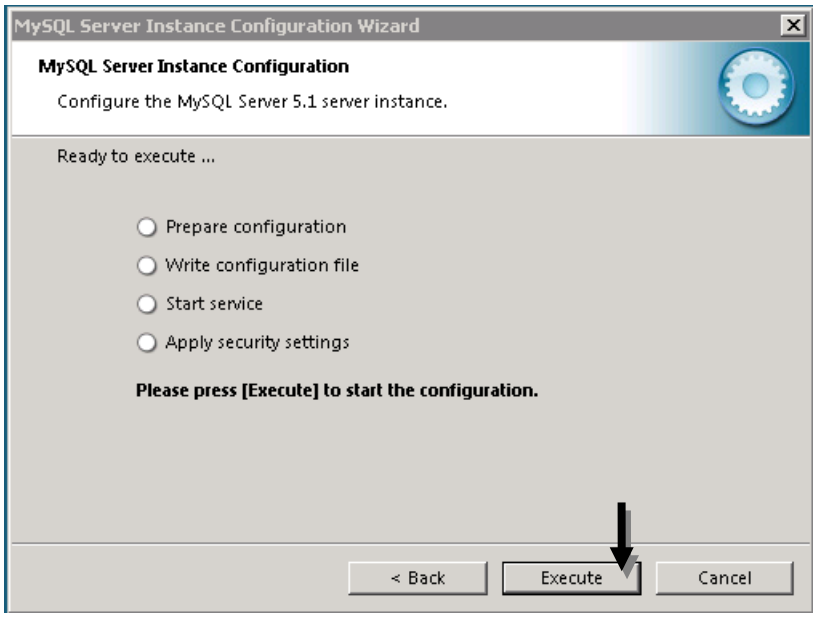
14. Check both 'Install as Windows Service' (this will allow the database to launch and start automatically) and 'Include Bin Directory in Windows PATH' (this will help with ease of populating the database). Leave the Service Name as MySQL and ensure that the 'Launch the MySQL Server automatically' box is checked. Click 'Next'.

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.1 server instance.
Please set the Windows options.
Install As Windows Service
This is the recommended way to run the MySQL server on Windows.
Service Name:
MySQL
Launch the MySQL Server automatically
Include Bin Directory in Windows PATH
Check this option to include the directory containing the server / client executables in the Windows PATH variable so they can be called from the command line.
< Back
Next >
Cancel

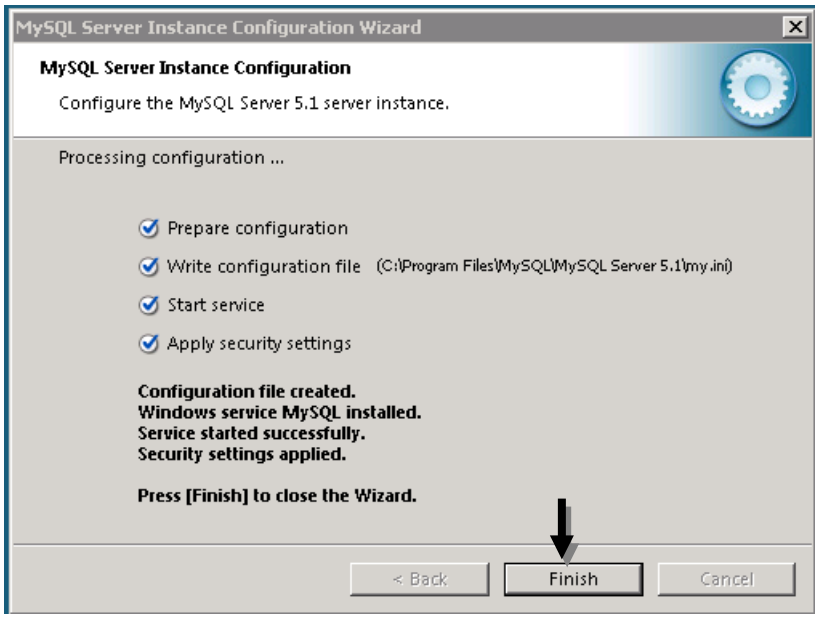
15. Select the 'Modify Security Settings' and enter a root password. Optionally, check the box 'Enable root access from remote machines'. These credentials will be referred to as your 'MySQL Admin Password' in this installation guide. Click 'Next'. MAKE SURE YOU REMEMBER THESE CREDENTIALS AS THEY WILL BE NEEDED LATER.

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.1 server instance.
Please set the security options.
Modify Security Settings
New root password:
Enter the root password.
Confirm:
Retype the password.
Enable root access from remote machines
Create An Anonymous Account
This option will create an anonymous account on this server.
Please note that this can lead to an insecure system.
< Back
Next >
Cancel

16. Click ‘Execute’ to start the configuration of the database.



17. Select ‘Finish’ to close the Wizard once the configuration is complete.



V. Setting Up the MySQL Databases

1. Open Windows Command Prompt via: Start->Run->typing 'cmd'->Click 'Ok'.
2. Next, create an origins database by:
   a. Typing (with exact syntax→ only 3 spaces total: one space after mysql, u, and root):

      mysql –u root –p*(Your MySQL Admin Password)* [enter]

C:\Users\ >mysql -u root -pasamplepassword
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 3
Server version: 5.1.47-community MySQL Community Server (GPL)
Copyright (c) 2000, 2010, Oracle and/or its affiliates. All rights reserved.
This software comes with ABSOLUTELY NO WARRANTY. This is free software,
and you are welcome to modify and redistribute it under the GPL v2 license
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql>

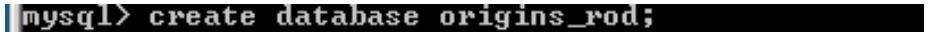
   **Sample password here was 'asamplepassword'

   b. Create a database called 'origins' by typing:

      create database origins; [enter]

   c. Create a database called 'origins_rod' (rod = Repository Of Data) by typing:

      create database origins_rod; [enter]



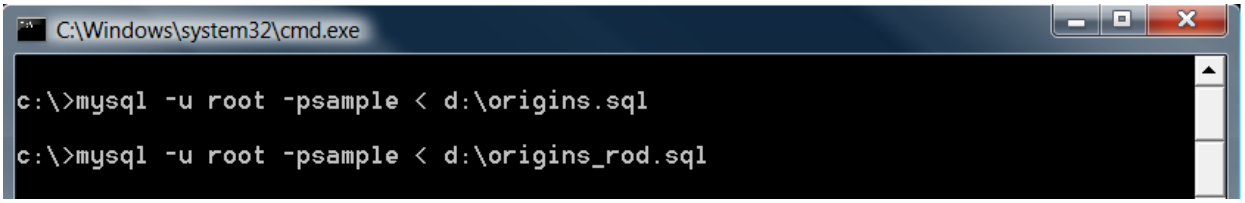
   d. Exit out of the mysql command by typing '**exit** [enter]'.

   e. Next, insert the JLEIE Installation CD provided to you (there are two .sql files: origins.sql and origins_rod.sql to be loaded into MySQL).

f. Next, load these two .sql files into MySQL. To do this, type:

i. **mysql –u root –p*(Your MySQL Admin Password)* < *(the location of the origins.sql file)***

ii. **mysql –u root –p*(Your MySQL Admin Password)* < *(the location of the origins_rod.sql file)***



**sample password here was 'sample'

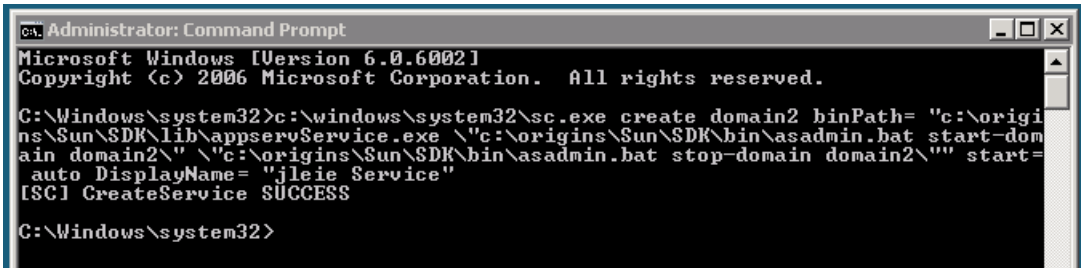
**The location of the .sql, if directly accessing them off of the CD should be d:\config\db\mysql\origins.sql and d:\ config\db\mysql\origins_rod.sql . If the files are in another location, type the full directory of where they are located (You can right click on the file in the place it is stored, go to properties and it will give you the location. Follow this address by origins.sql or origins_rod.sql). If there is a space in the pathname, you will need to surround the pathname with double-quotes.

VI. Creating a Domain Windows Service and Enabling Automatic Restart Upon Reboot

A. Creating a domain Windows Service

1. Open up Windows command prompt as an administrator by: Start->Accessories->right click on Command Prompt->Run as Administrator.
2. Type (make sure EXACT syntax; note that when '=' is used, there should only be one space after the '='):

```
c:\windows\system32\sc.exe create domain2 binPath=
"c:\origins\Sun\SDK\lib\appservService.exe
\"c:\origins\Sun\SDK\bin\asadmin.bat start-domain
domain2\"  \"c:\origins\Sun\SDK\bin\asadmin.bat stop-
domain domain2\"" start= auto DisplayName= "jleie Service"
```


Administrator: Command Prompt
Microsoft Windows [Version 6.0.6002]
Copyright (c) 2006 Microsoft Corporation. All rights reserved.
C:\Windows\system32>c:\windows\system32\sc.exe create domain2 binPath= "c:\origi
ns\Sun\SDK\lib\appservService.exe \"c:\origins\Sun\SDK\bin\asadmin.bat start-dom
ain domain2\" \"c:\origins\Sun\SDK\bin\asadmin.bat stop-domain domain2\"" start=
auto DisplayName= "jleie Service"
[SC] CreateService SUCCESS
C:\Windows\system32>

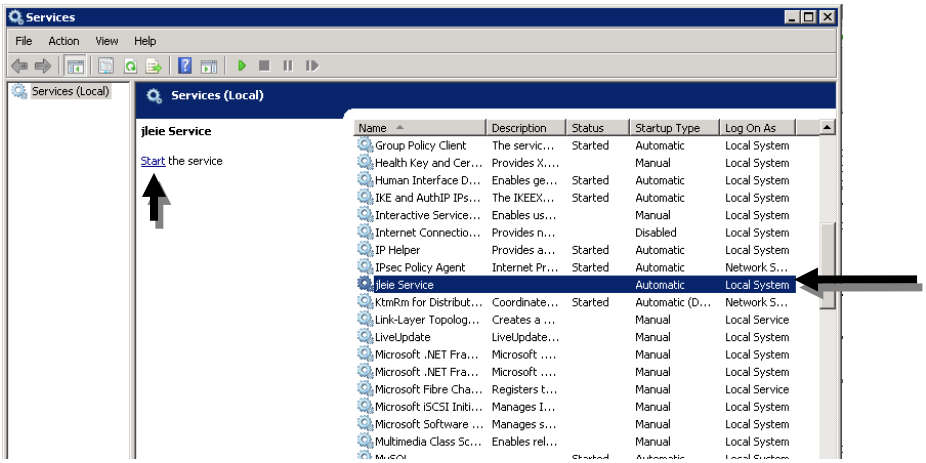
**If you do not get the output of 'SUCCESS', then you must retype the above phrase again as it did not create the service.

**If you need to delete the Windows service you created and then create it again, see Troubleshooting Tips

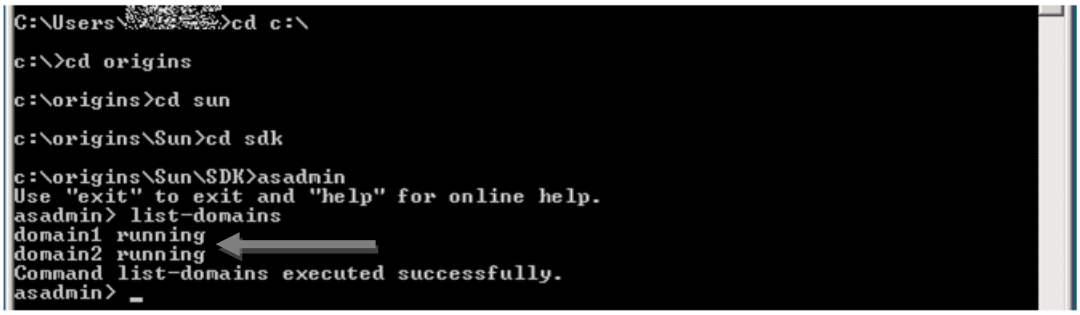
3. Check to see that the Windows Service is running under Start->Administrative Tools-> Services. "jleie Service" should appear in the list with an 'Automatic' startup type. Note that the domain1 Windows service is named: "SunJavaSystemAppserver9PE".

B. Enabling Automatic Restart Upon Reboot

1. Go under Start→Administrative Tools→Services. Find the 'jleie Service' Windows service that was created in part A and click to highlight it. Click 'start' to start the Windows Service.

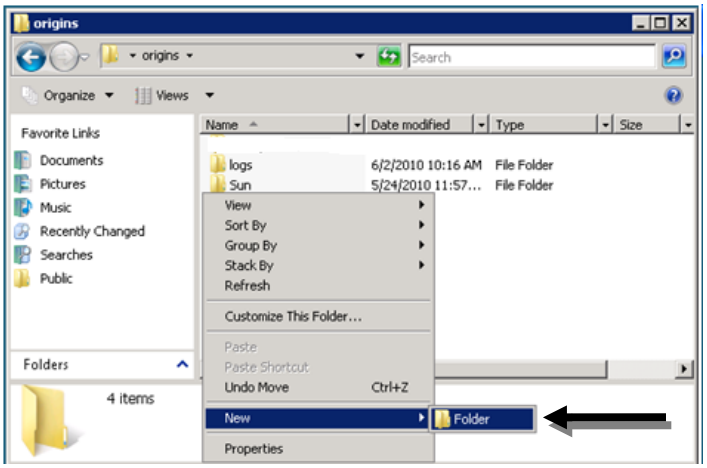

Services
File Action View Help
Services (Local)
Services (Local)
jleie Service
Start the service
Name Description Status Startup Type Log On As
Group Policy Client The servic... Started Automatic Local System
Health Key and Cer... Provides X.... Manual Local System
Human Interface D... Enables ge... Started Automatic Local System
IKE and AuthIP IPs... The IKEEX... Started Automatic Local System
Interactive Service... Enables us... Manual Local System
Internet Connectio... Provides n... Disabled Local System
IP Helper Provides a... Started Automatic Local System
IPsec Policy Agent Internet Pr... Started Automatic Network S...
jleie Service Automatic Local System
KtmRm for Distribut... Coordinate... Started Automatic (D... Network S...
Link-Layer Topolog... Creates a ... Manual Local Service
LiveUpdate LiveUpdate... Manual Local System
Microsoft .NET Fra... Microsoft .... Manual Local System
Microsoft .NET Fra... Microsoft .... Manual Local System
Microsoft Fibre Cha... Registers t... Manual Local Service
Microsoft iSCSI Initi... Manages I... Manual Local System
Microsoft Software ... Manages s... Manual Local System
Multimedia Class Sc... Enables rel... Manual Local System

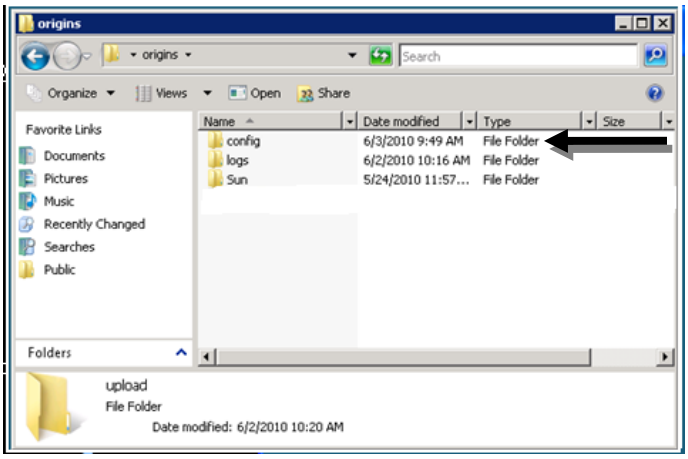
2. Now check to make sure that the Windows Service is working correctly. To do this:
   a. Reboot the server (Start->Shutdown->Reboot).
   b. Log back in.
   c. Open command prompt (via Start->run-> type 'cmd') and change directory down to where the asadmin command is by typing **`cd c:\origins\Sun\SDK`** [enter]; **`asadmin`** [enter]; **`list-domains`** [enter]. If working properly, domain1 and domain2 should be shown as running.



VII. Editing the jleie.properties File

1. Create a 'config' directory under the origins directory on the C drive. Download the jleie.properties from the JLEIE Installation CD provided to you, to this newly created 'config' directory.

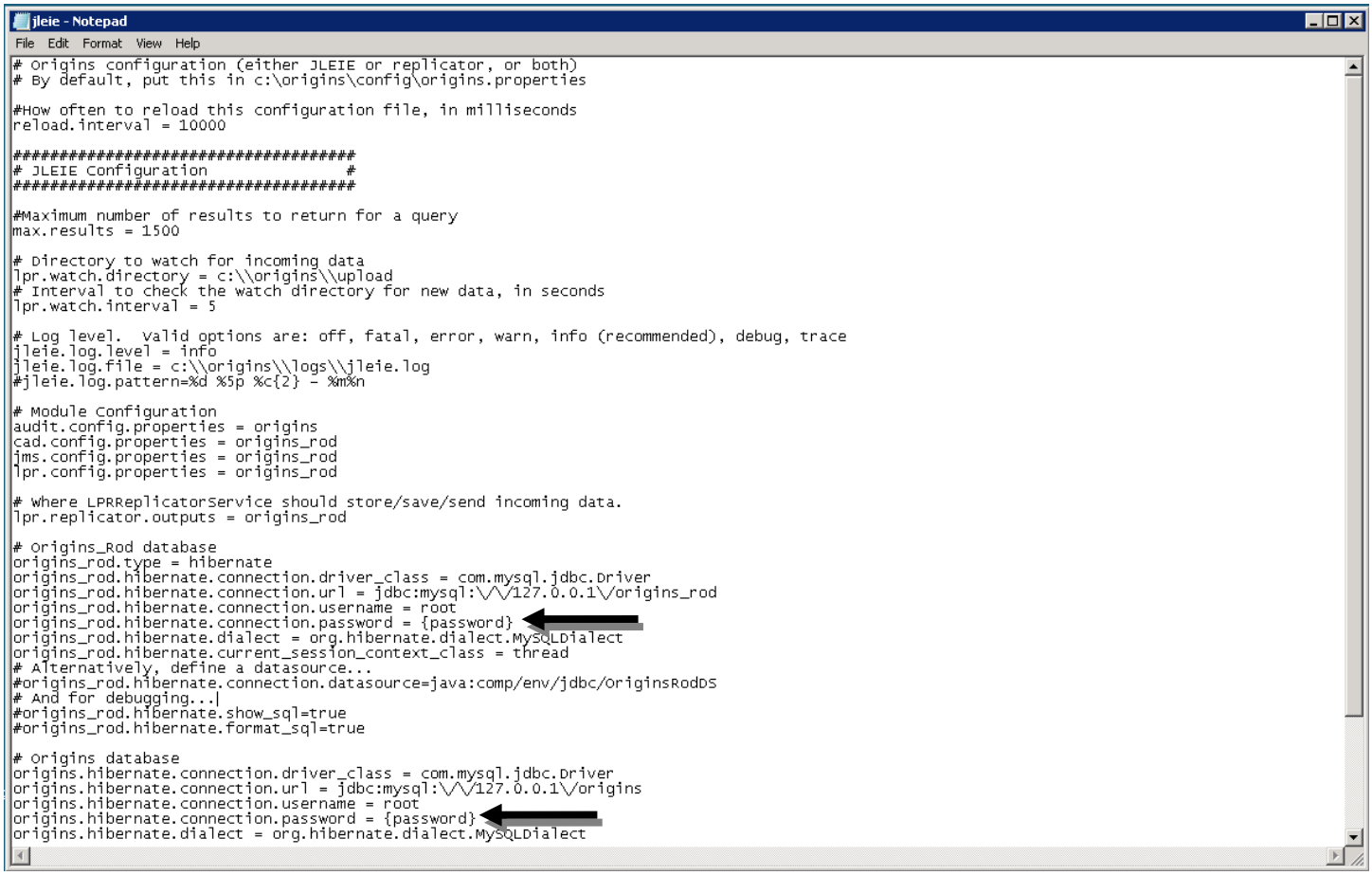




** If you are installing the system somewhere else, you can define a system property "origins.config.file" by going to http://localhost:4949, logging in as admin, clicking Configuration then System Properties→Add Property→origins.config.file (with the value being the full pathname to jleie.properties) **

2. The file needs to be edited with {password} being your MySQL Admin Password. This can be done via:

    a. Open the .properties file in notepad. Edit the two {password} blocks under both origins_rod and origins.


jleie - Notepad
File Edit Format View Help
Origins configuration (either JLEIE or replicator, or both)
By default, put this in c:\origins\config\origins.properties
#How often to reload this configuration file, in milliseconds
reload.interval = 10000
###################################
JLEIE Configuration
###################################
#Maximum number of results to return for a query
max.results = 1500
# Directory to watch for incoming data
lpr.watch.directory = c:\\origins\\upload
# Interval to check the watch directory for new data, in seconds
lpr.watch.interval = 5
# Log level. Valid options are: off, fatal, error, warn, info (recommended), debug, trace
jleie.log.level = info
jleie.log.file = c:\\origins\\logs\\jleie.log
#jleie.log.pattern=%d %5p %c{2} - %m%n
# Module Configuration
audit.config.properties = origins
cad.config.properties = origins_rod
jms.config.properties = origins_rod
lpr.config.properties = origins_rod
# Where LPRReplicatorService should store/save/send incoming data.
lpr.replicator.outputs = origins_rod
# Origins_Rod database
origins_rod.type = hibernate
origins_rod.hibernate.connection.driver_class = com.mysql.jdbc.Driver
origins_rod.hibernate.connection.url = jdbc:mysql:\/\/127.0.0.1\/origins_rod
origins_rod.hibernate.connection.username = root
origins_rod.hibernate.connection.password = {password}
origins_rod.hibernate.dialect = org.hibernate.dialect.MySQLDialect
origins_rod.hibernate.current_session_context_class = thread
# Alternatively, define a datasource...
#origins_rod.hibernate.connection.datasource=java:comp/env/jdbc/OriginsRodDS
And for debugging...|
#origins_rod.hibernate.show_sql=true
#origins_rod.hibernate.format_sql=true
# Origins database
origins.hibernate.connection.driver_class = com.mysql.jdbc.Driver
origins.hibernate.connection.url = jdbc:mysql:\/\/127.0.0.1\/origins
origins.hibernate.connection.username = root
origins.hibernate.connection.password = {password}
origins.hibernate.dialect = org.hibernate.dialect.MySQLDialect

    b. Replace {password} text (including the brackets) with your MySQL Admin Password.

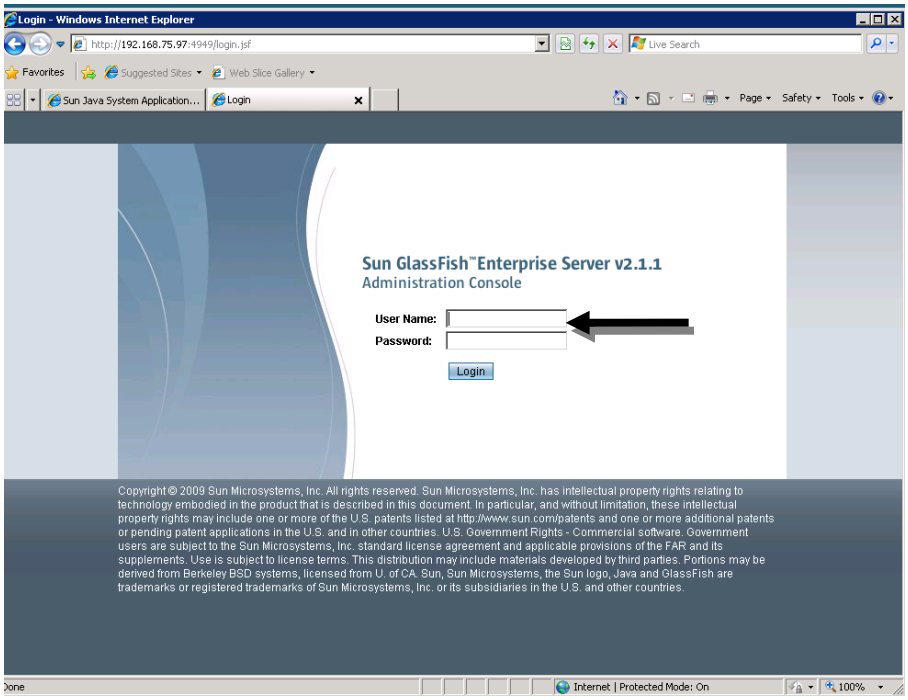
**sample password here was ‘asamplepassword’

    c. Save and close the file.

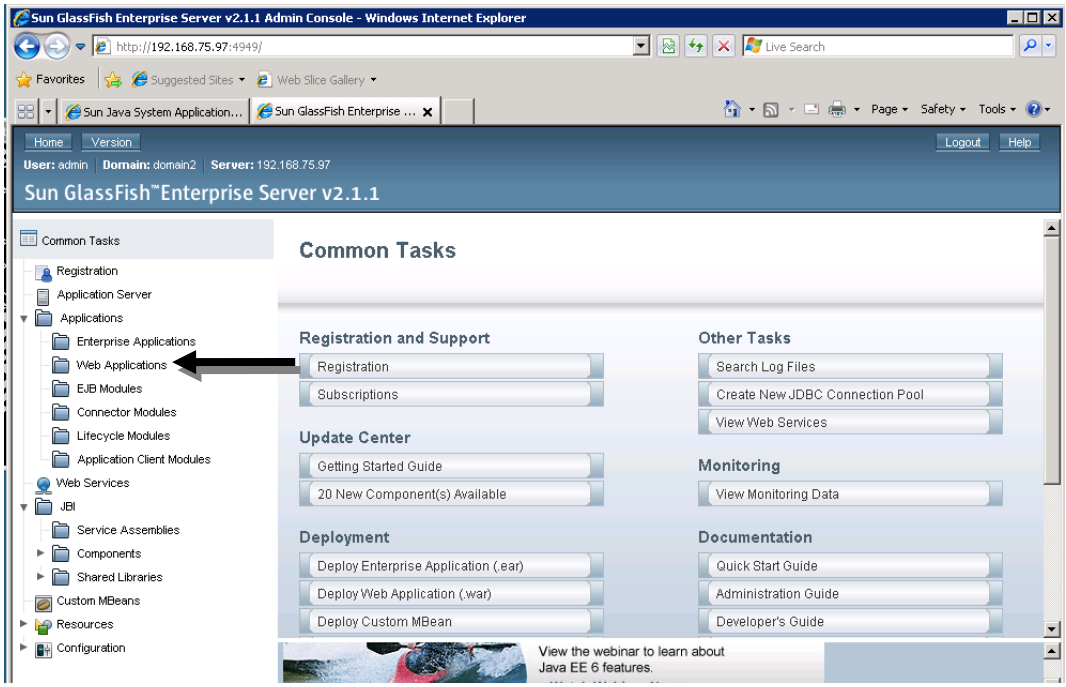
VIII. Deploy JLEIE

A. Deploy .war files on domain2 and Test the Database

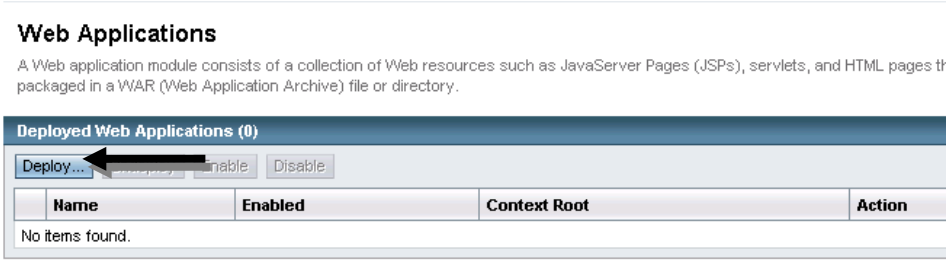
1. To deploy the .war files, open your web browser and go to http://localhost:4949/. Enter your 'GlassFish Admin Password for domain2'.


Login - Windows Internet Explorer
Sun GlassFish™Enterprise Server v2.1.1
Administration Console
User Name:
Password:
Login
Copyright © 2009 Sun Microsystems, Inc. All rights reserved. Sun Microsystems, Inc. has intellectual property rights relating to technology embodied in the product that is described in this document. In particular, and without limitation, these intellectual property rights may include one or more of the U.S. patents listed at http://www.sun.com/patents and one or more additional patents or pending patent applications in the U.S. and in other countries. U.S. Government Rights - Commercial software. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements. Use is subject to license terms. This distribution may include materials developed by third parties. Portions may be derived from Berkeley BSD systems, licensed from U. of CA. Sun, Sun Microsystems, the Sun logo, Java and GlassFish are trademarks or registered trademarks of Sun Microsystems, Inc. or its subsidiaries in the U.S. and other countries.

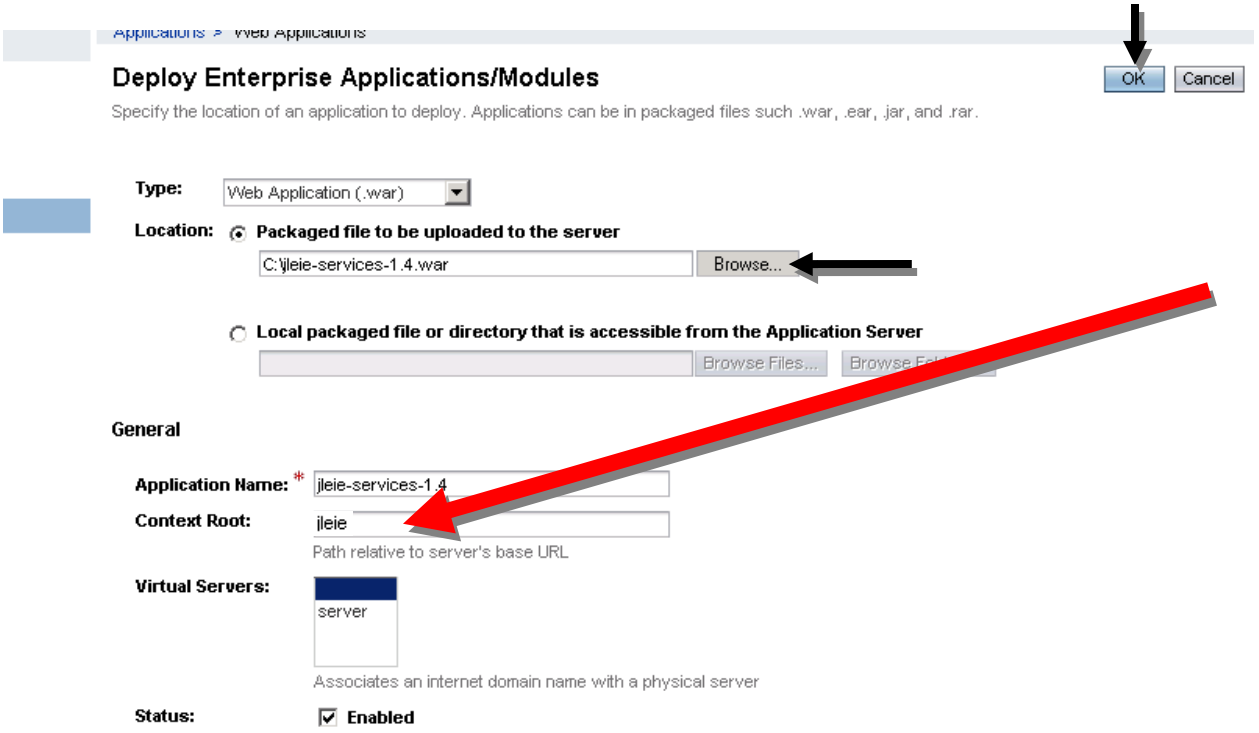
2. Go to Web Applications on the next screen, in the left hand menu.



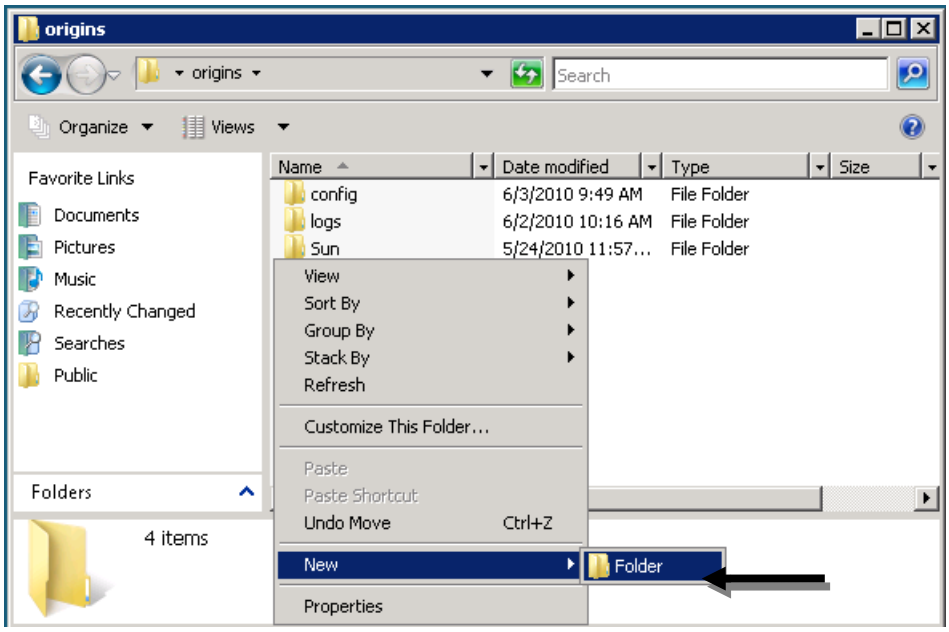
3. Next, click ‘Deploy’.

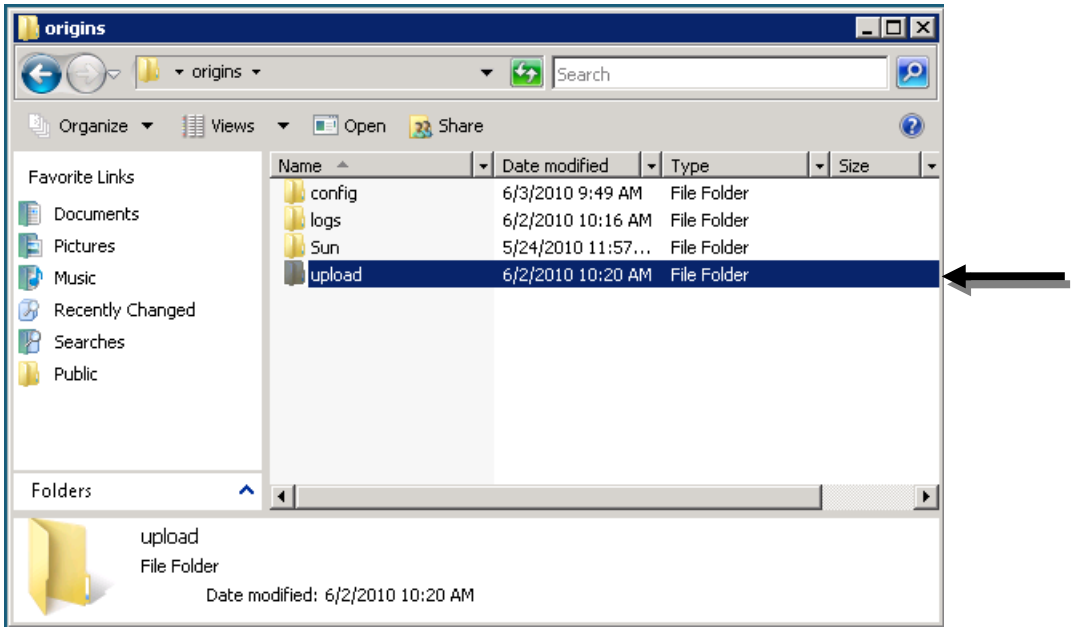

Web Applications
A Web application module consists of a collection of Web resources such as JavaServer Pages (JSPs), servlets, and HTML pages th
packaged in a WAR (Web Application Archive) file or directory.
Deployed Web Applications (0)
Deploy...
Disable
Name
Enabled
Context Root
Action
No items found.

4. Next, ‘Browse’ for the jleie-services-1.7.2.war file that is on your JLEIE Installation CD, change the Context Root to ‘jleie’ and click ‘Ok’. Do not forget to change the context root to ‘jleie’ by removing the –services-x.x suffix, or replicators will be unable to connect.



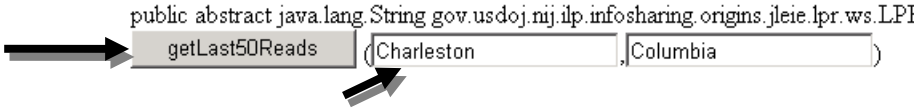
5. Go to the c:\ drive and open the origins directory. Create a new directory called 'upload'.



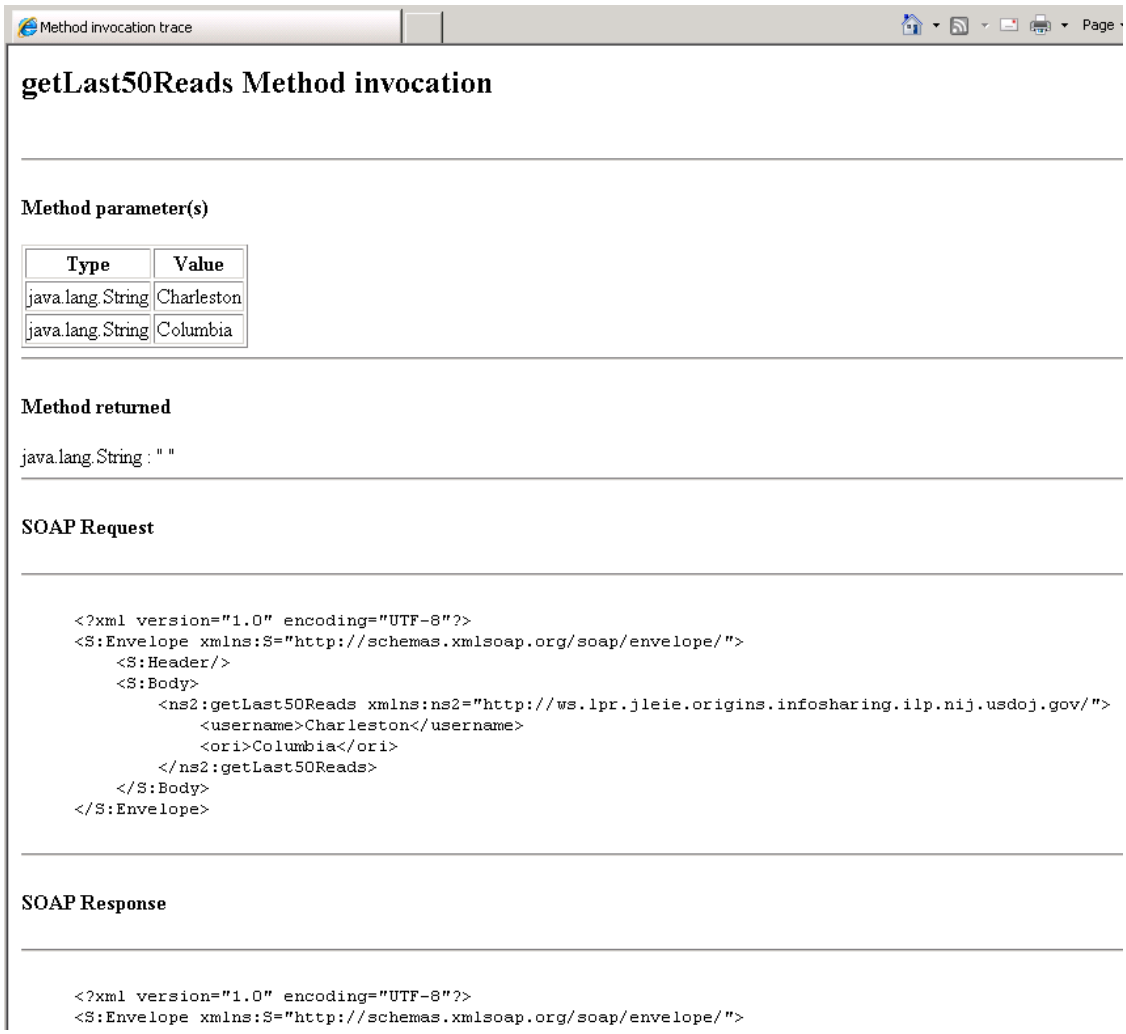


6. In your web browser, go to http://localhost:9090/jleie/LPRHandlerService?tester

   a. Put any value into the two boxes and click the button that says 'getLast50Reads'.



b. If it worked correctly, the screen should look something like the following:

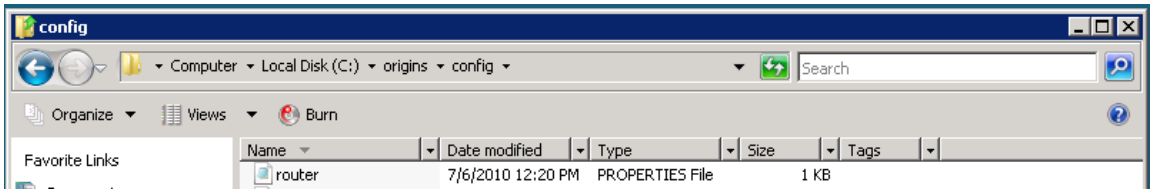


B. Monitoring

Monitor the c:\origins\logs\jleie.log file which keeps track of problems in a notepad file. Open to see if it is giving error messages.

IX. Copy router.properties

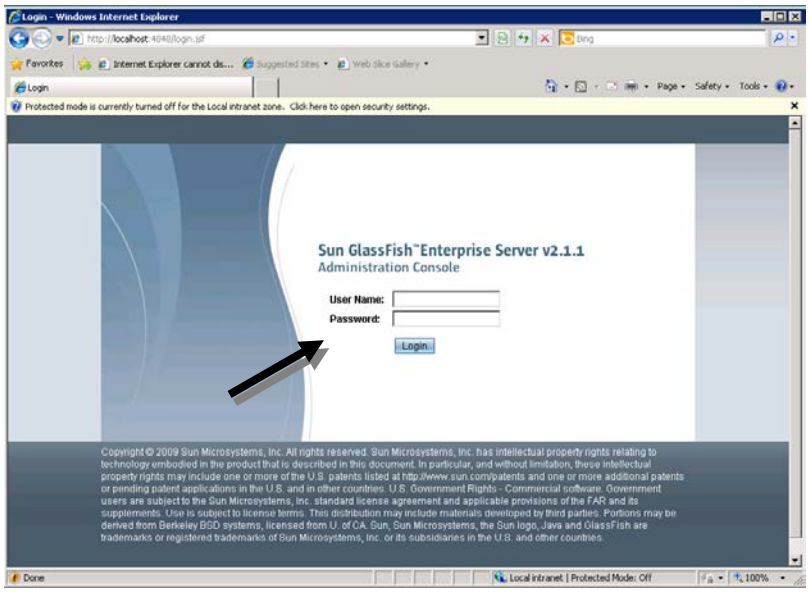
The router.properties file is on the Installation CD. Copy this into c:\origins\config. Normally it does not require any changes.



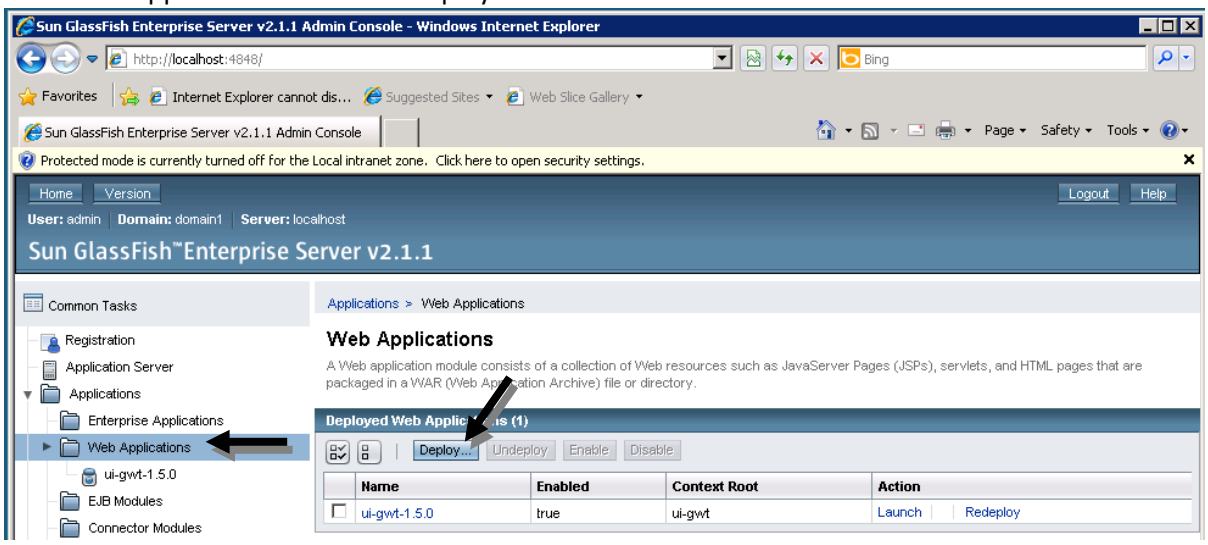
X. Deploy JRA-Router

1. Deploy jra-router-1.7.2.war on domain1

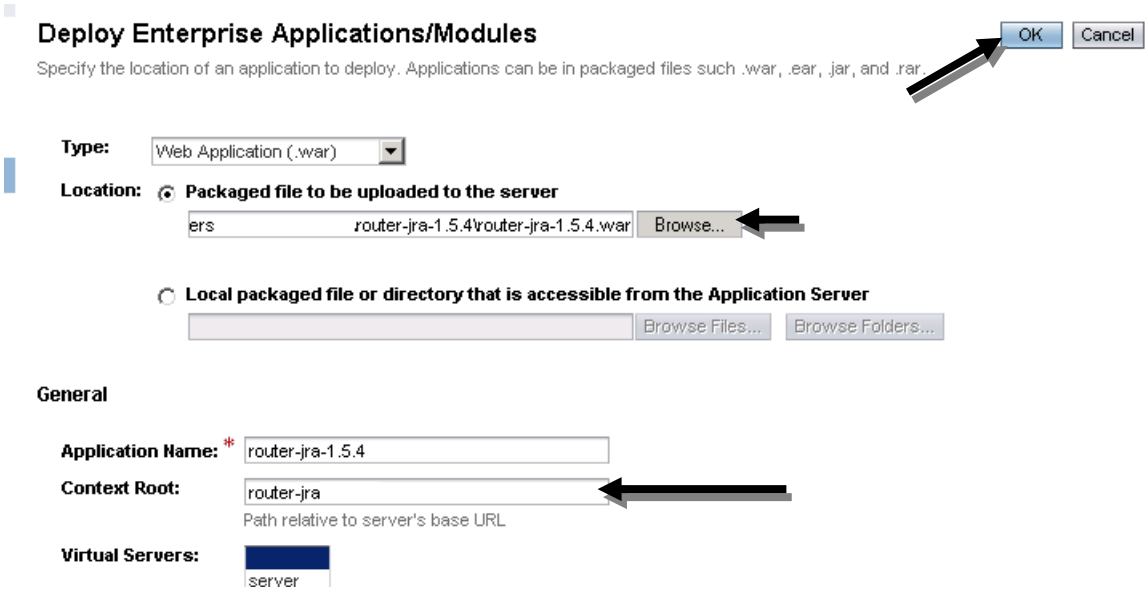
Go to http://localhost:4848. Enter your username and 'GlassFish password for domain1'.



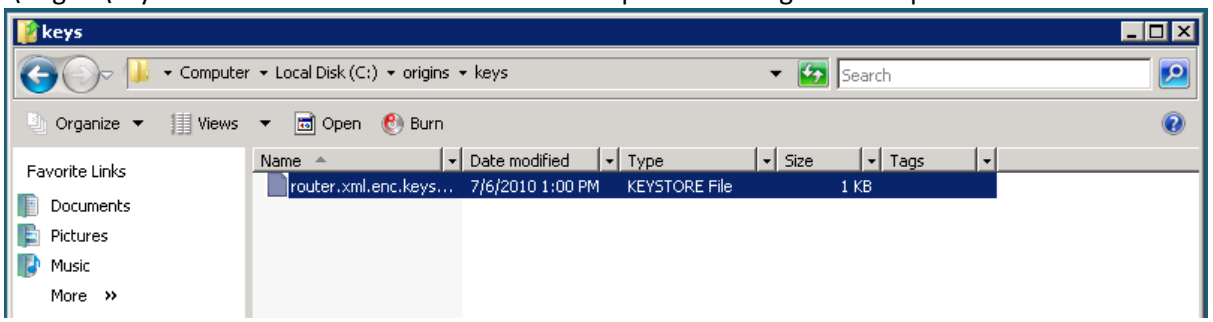
2. Go to 'Web Applications' and click 'Deploy'.



3. Browse for the router-jra-1.7.2.war file, change the context root to router-jra, and click 'Ok'.



4. After deploying the router-jra-1.7.2.war file, a router.xml.enc.keystore key file will be created in c:\origins\keys. This file needs to distributed to all replicators using secure replication.

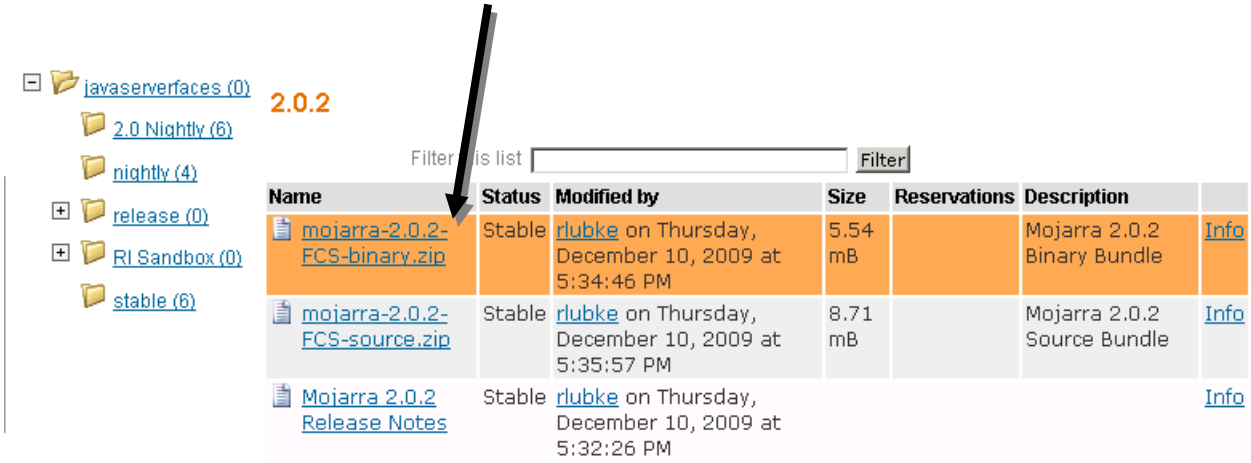


LPRD UI-JSF2 Client Installation Guide

**LPRD Server Installation is a prerequisite for completing this installation.

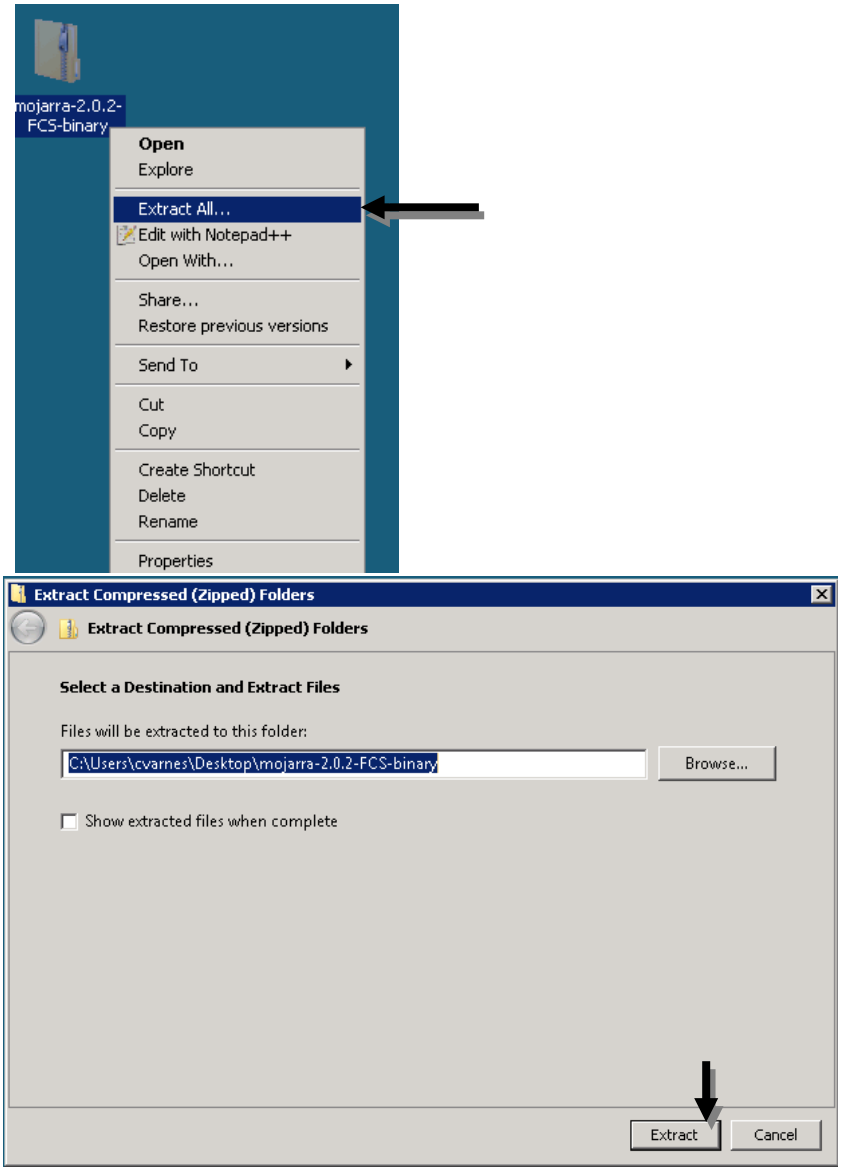
I. Upgrade Glassfish JSF (Mojarra) version

1. Go to: https://javaserverfaces.dev.java.net/
2. Download the Mojarra 2.0.0 binary bundle.

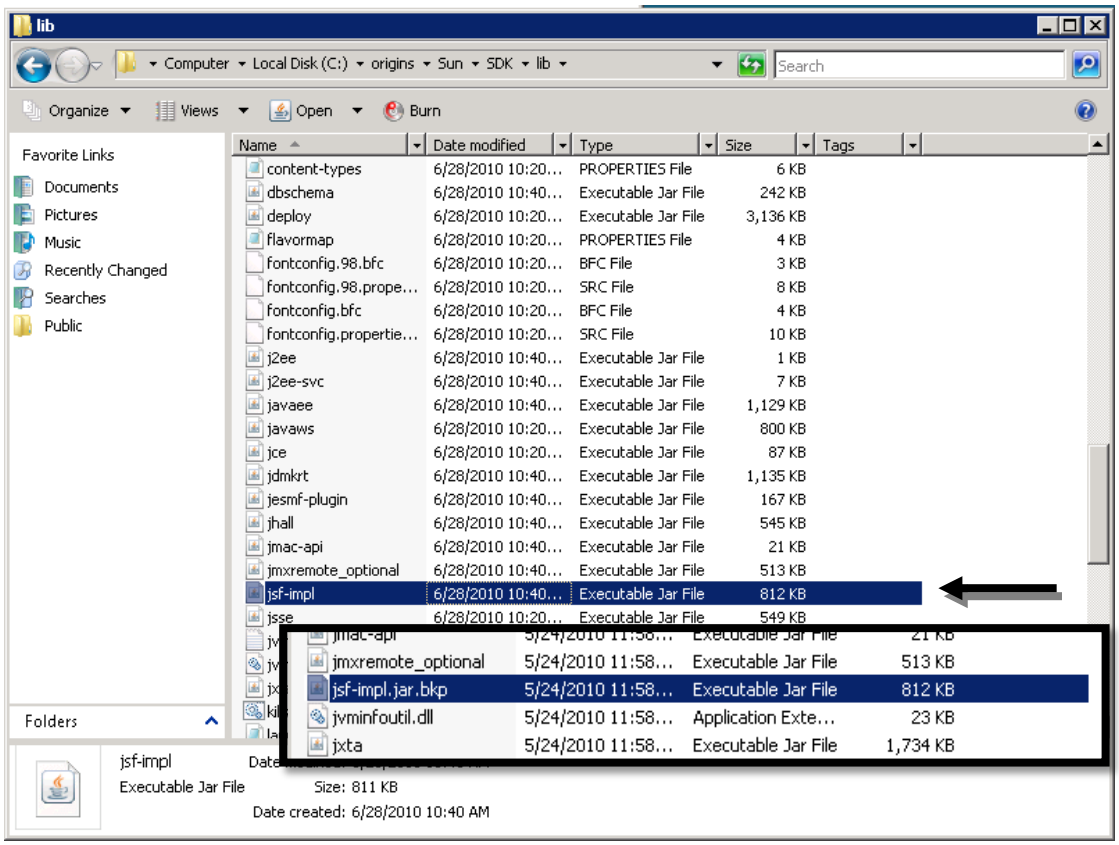


3. Save the file on your desktop or a familiar download location.

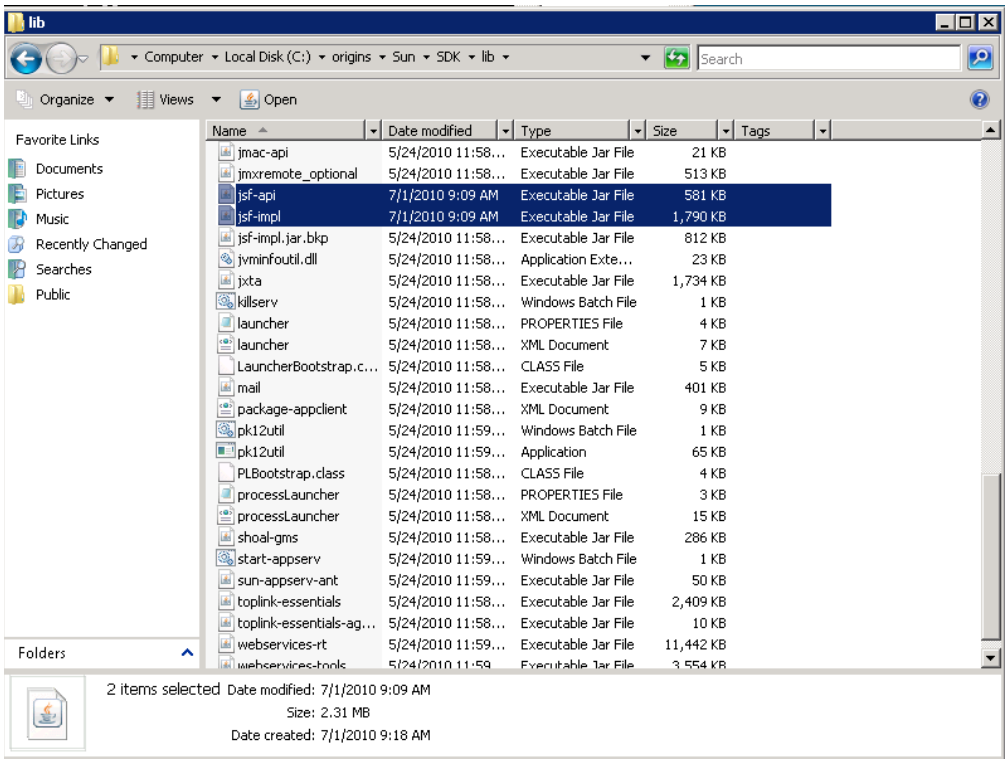
4. Next, extract the zipped folder by right clicking on the downloaded directory and selecting ‘Extract All’ from the dropdown menu. Continue the extracting process by selecting ‘Extract’ when the Extraction Wizard appears (the default destination will put an unzipped file in the same place where your zipped folder is).



5. Rename the jsf-impl.jar found in [GlassFish installed Directory]\lib (i.e., c:\origins\Sun\SDK\lib) to jsf-impl.jar.bkp.



6. Copy and paste the new jsf-api and jsf-impl .jar files (found in the recently unzipped file's lib directory) to [installation directory of GlassFish]/lib (i.e., c:\origins\Sun\SDK\lib).

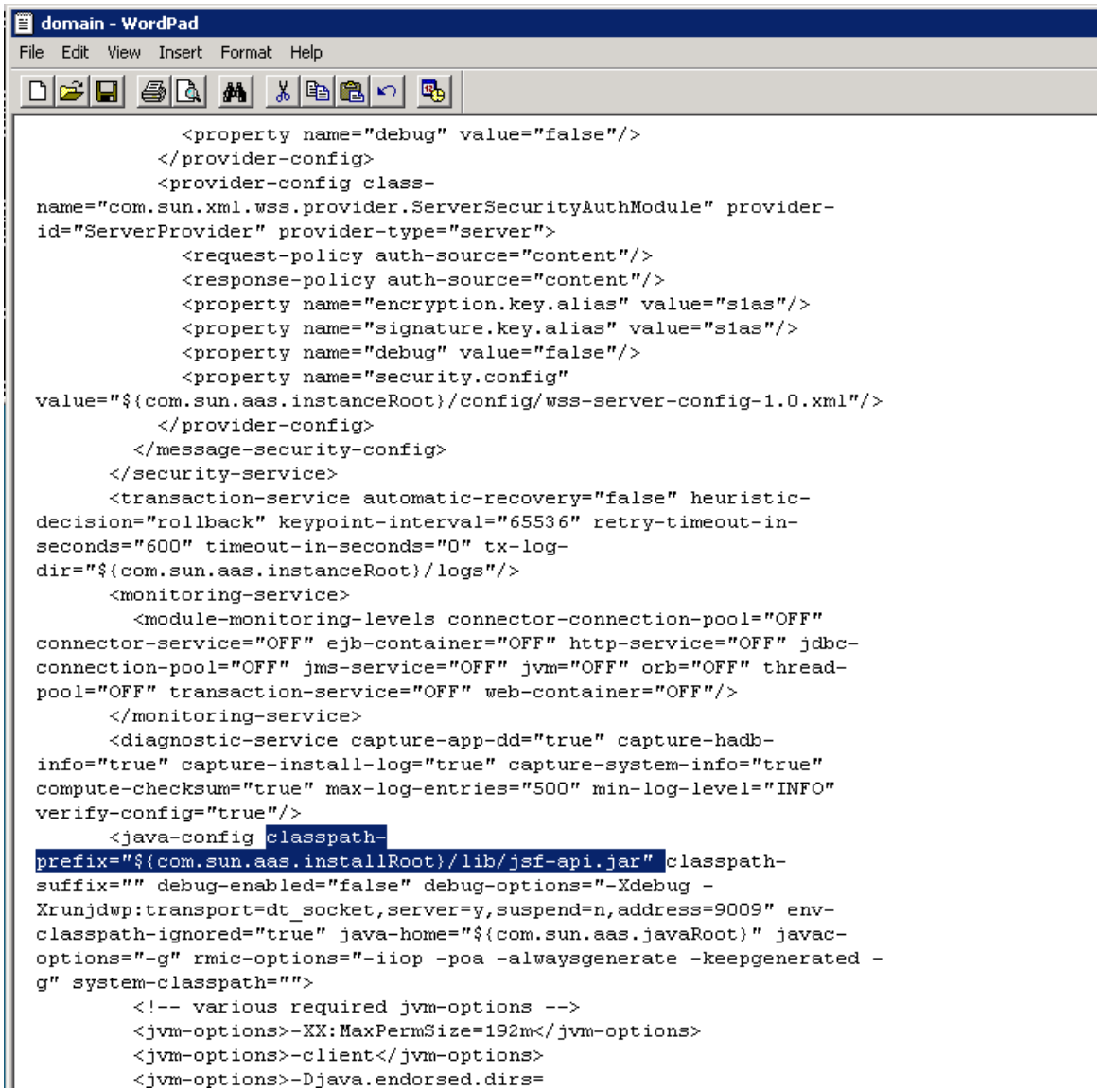


7. Find the domain.xml file found in:

   [installation directory of GlassFish]/domains/[domain-name]/config/domain.xml

   a. Open this file in WordPad or some other text editor program.

   b. Add 'classpath-prefix="${com.sun.aas.installRoot}/lib/jsf-api.jar" to the java-config element (do a Find search for 'java-config'. The first 'java-config' that it comes to is the java-config element spoken of).

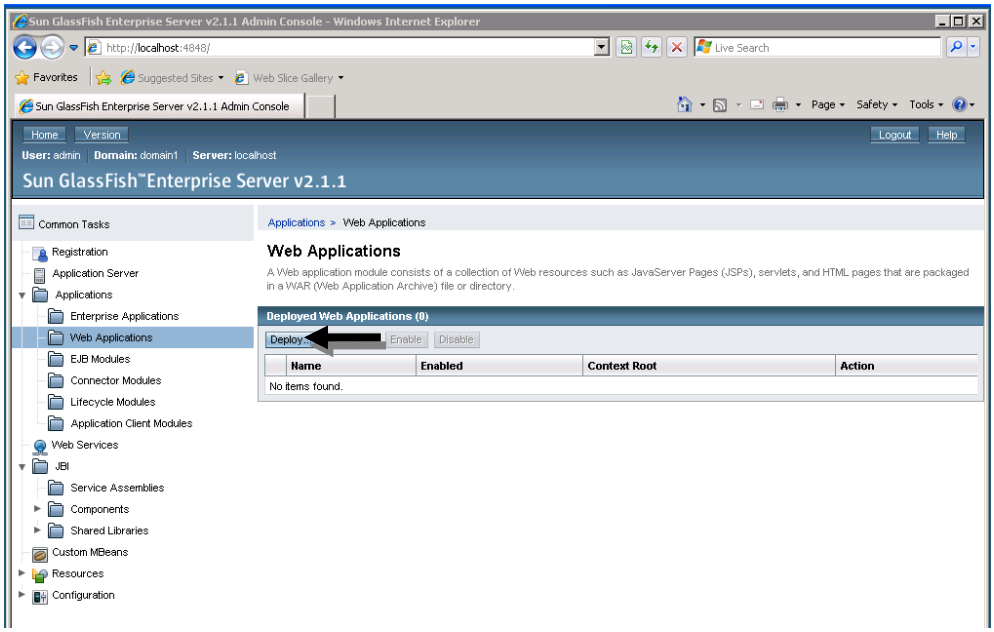


8. Repeat step 7 for every domain in [installation directory of GlassFish]/domains . Domain2 also needs the above procedure.

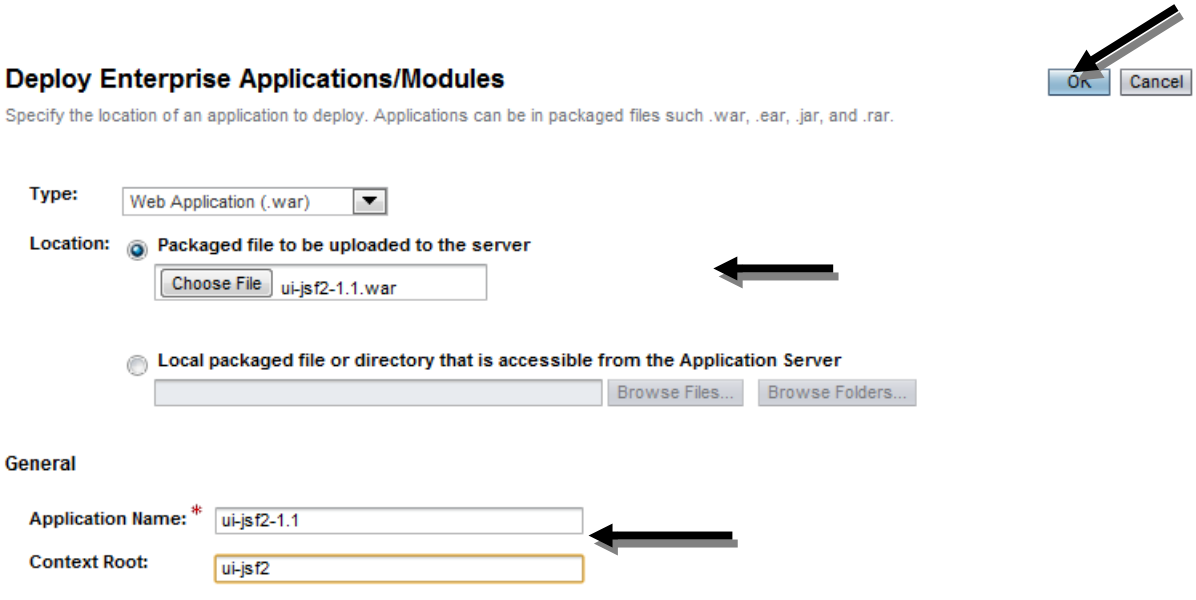
9. Restart your Glassfish domains (using Windows Services or by rebooting the server).

II. Deploy ui-jsf2.war on Domain1

1. Go to http://localhost:4848/
2. Login with your GlassFish Admin Password for Domain1.
3. Go to 'Web Applications' and 'Deploy'.

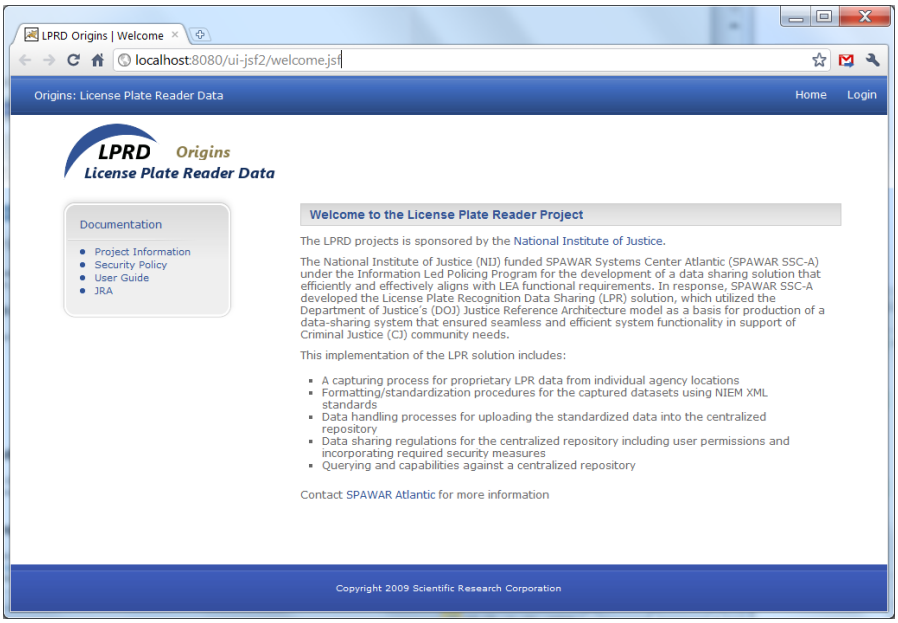


4. Browse for the ui-jsf2.war file located on your Installation Disk, change the context root to 'ui-jsf2', and click 'Ok'. Log out and close your browser.



III. Check That The Server Is Running

Go to http://localhost:8080/ui-jsf2. You should see the following screen. However, you will not be able to log in until completing the next sections installing LDAP:


LPRD Origins | Welcome
localhost:8080/ui-jsf2/welcome.jsf
Origins: License Plate Reader Data
Home
Login
LPRD Origins
License Plate Reader Data
Documentation
Project Information
Security Policy
User Guide
JRA
Welcome to the License Plate Reader Project
The LPRD projects is sponsored by the National Institute of Justice.
The National Institute of Justice (NIJ) funded SPAWAR Systems Center Atlantic (SPAWAR SSC-A) under the Information Led Policing Program for the development of a data sharing solution that efficiently and effectively aligns with LEA functional requirements. In response, SPAWAR SSC-A developed the License Plate Recognition Data Sharing (LPR) solution, which utilized the Department of Justice's (DOJ) Justice Reference Architecture model as a basis for production of a data-sharing system that ensured seamless and efficient system functionality in support of Criminal Justice (CJ) community needs.
This implementation of the LPR solution includes:
A capturing process for proprietary LPR data from individual agency locations
Formatting/standardization procedures for the captured datasets using NIEM XML standards
Data handling processes for uploading the standardized data into the centralized repository
Data sharing regulations for the centralized repository including user permissions and incorporating required security measures
Querying and capabilities against a centralized repository
Contact SPAWAR Atlantic for more information
Copyright 2009 Scientific Research Corporation

IV. Installation of LDAP

A. Install Apache Directory Server

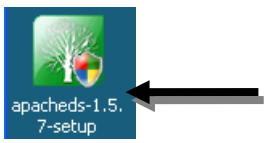
1. Go to: http://directory.apache.org/.
2. Click on the green Directory Server.
3. Click on the ApacheDS 1.5.7 in the Downloads menu on the left sidebar.

Apache Directory
Apache Directory Projec
ApacheDS 1.5
Home
Features
Downloads
ApacheDS 1.5.7 New
Older versions
Documentation
Basic User's Guide
Advanced User's Guide
Developer's Guide
Generated Reports (e.g.
JavaDocs)
ApacheDS 1.0 (old)
Home
About Apache
ApacheDS v1.5
The next version after 1.0 is named 1.5, because we not only added some ne
Please be informed that although the 1.5.x branch will produce official release
introduce new features. Although the quality of the releases will be significant
primarily for testing new features.
These features will be stabilized in the 2.0.x branch. The rule of thumb to follo
with bug fixes only and X.5 versions are feature introduction releases.
Important new features
Dynamic Schema (1.5.0+)
LDAP Stored Procedures and LDAP Triggers (1.5.0+)
SASL/StartTLS (1.5.1+)
Multi-Master Replication (1.5.?)
Dynamic configuration (1.5.?)

4. Select 'Download Windows Installer'.
5. Click on the .exe file in the light green box.

Download for Windows
We suggest the following mirror site for your download:
http://mirror.cloudera.com/apache/[...]/apacheds-1.5.7-setup.exe

6. Save the application on your desktop or an easily accessible download directory.
7. Double click on the icon where the file was stored to start the installation process.



8. Click 'Next' when the Setup Wizard appears.
9. Choose 'I Agree', if you do.
10. Select 'Full' installation from the dropdown menu and leave 'Apache Directory Server' checked. Click 'Next'.
11. Use the default directory for the installation location. Click 'Next'.

12. Use the default directory for the Server Instances Home Directory. Click 'Next'.
13. Use the default directory for the JDK home Directory. Click 'Install'.
14. After installation is complete, click 'Next'.
15. Choose 'Finish' and 'Yes' to the 'Do you want to start the default directory instance?' question.

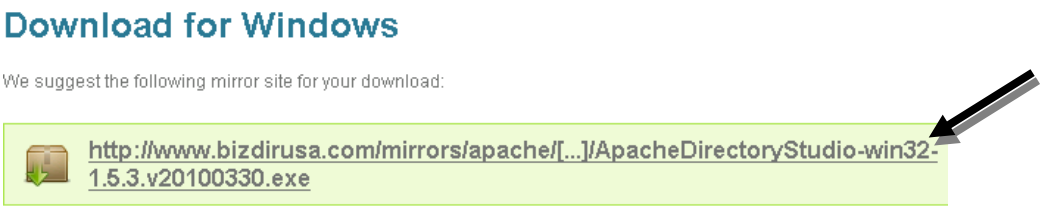
B. Install Apache Directory Studio

1. Go to: http://directory.apache.org/
2. Click on the blue Directory Studio.
3. Click on the 'Download Apache Directory Studio 1.5.3'.

Apache Directory Studio - The Eclipse based LDAP browser and directory client - Windows Internet Explorer
http://directory.apache.org/studio/
Favorites
Suggested Sites
Web Slice Gallery
Apache Directory Studio - The Eclipse based LDAP bro...
Apache Directory
Apache Directory Project | Apach
Apache Directory Studio
Home
Features
Screenshots
Downloads
Version 1.5.3 New
Nightly Builds
Older Versions
Documentation
User's Guide
Developer's Guide
Generated reports (e.g. JavaDocs)
Apache Directory Studio
The Eclipse based LDAP Browser and Directory client
Apache Directory Studio is a complete directory tooling platform intended to be used with any LDAP server however it is particularly designed for use with the Apache Directory Server.
Download Apache Directory Studio 1.5.3
Free for Mac OS X, Linux & Windows

4. Choose 'Download for Windows'.

5. Click on the .exe file in the light green box.


Download for Windows
We suggest the following mirror site for your download:
http://www.bizdirusa.com/mirrors/apache/[...]/ApacheDirectoryStudio-win32-1.5.3.v20100330.exe

6. Save the file on the desktop or an easily accessible download directory.
7. Once download is complete, close out of the download window.
8. Double click on the icon where the file was stored to start the installation process.

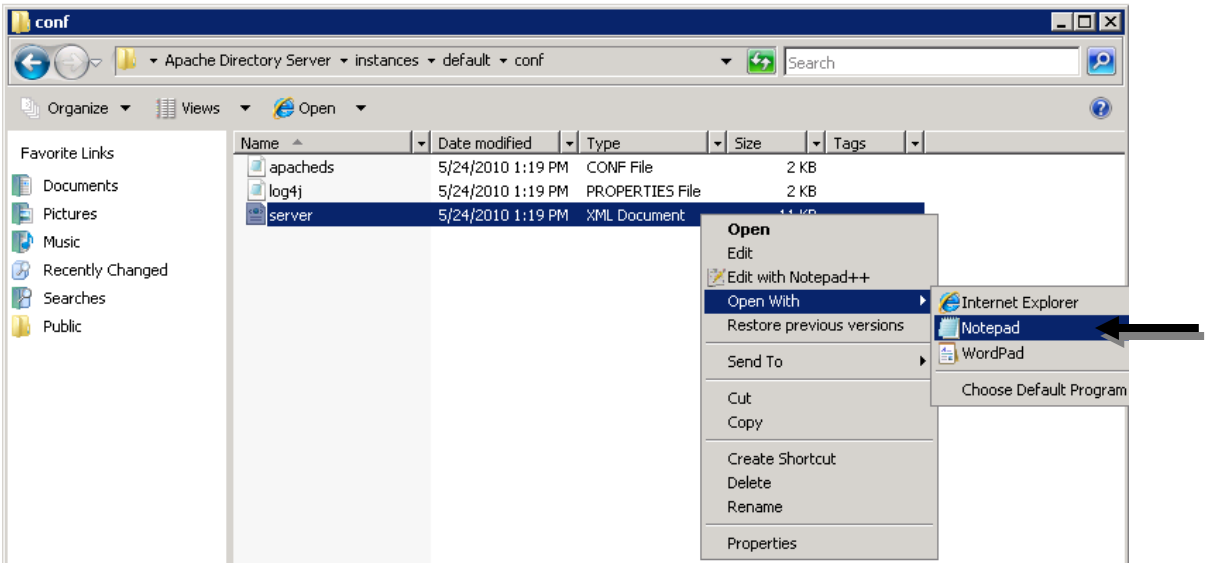
9. Click ‘Next’ when the Setup Wizard appears.
10. Choose ‘I Agree’, if you do.
11. Use the default destination folder preselected and click ‘Install’.
12. Once installation is complete, click ‘Next’.
13. Click ‘Finish’ to close out the Studio Setup Wizard.

V. Create a New Root

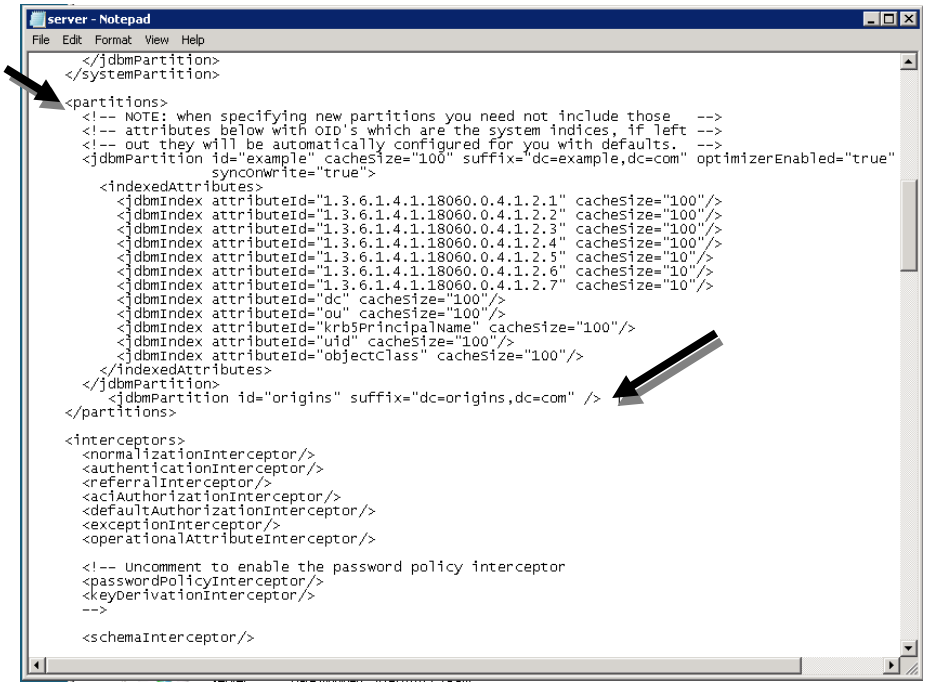
1. Next, find the LDAP installation directory. If you followed the steps above, it should be in c:\Program Files(x86).
2. Next, find the .xml file that is under the file extension:

   {ldap install directory}\instances\default\conf\server.xml

   (i.e., c:\Program Files(x86)\instances\default\conf\server.xml).
3. Open the .xml file in Notepad.

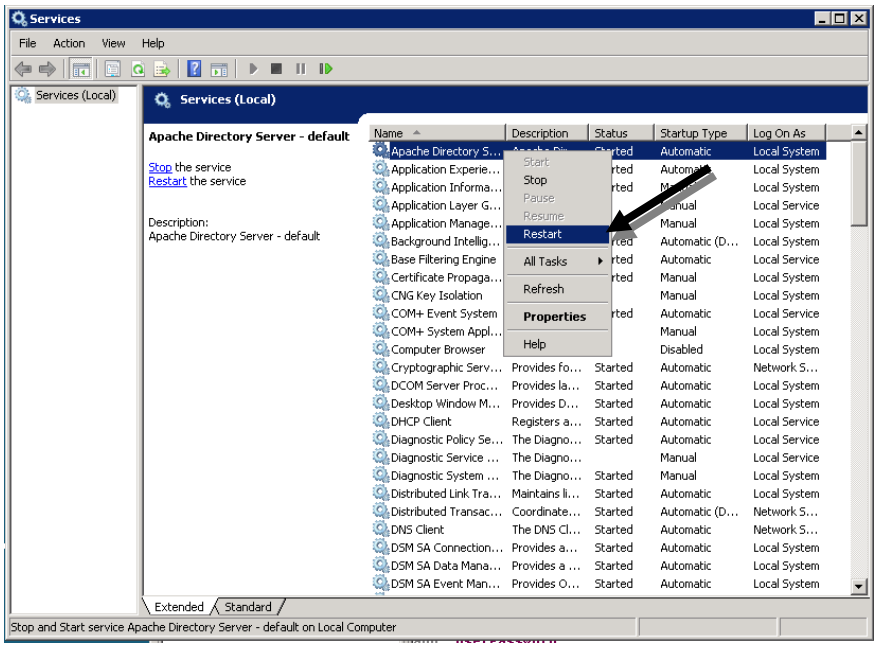


4. Scroll down to the <partitions> section. Add the following line to the end of the section (but before the </partitions>): <jdbmPartition id="origins" suffix="dc=origins,dc=com" />



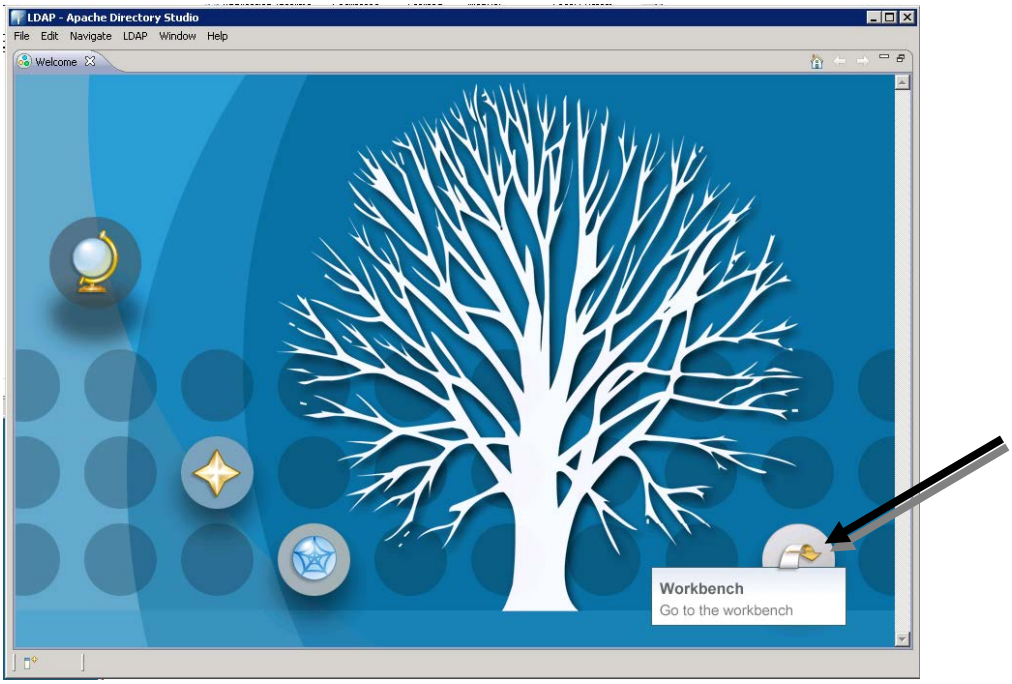
5. Save and close the file.

6. Next, restart the server. Go under Start->Administrative Tools->Services. Find the 'Apache Directory Server' and right click on it. Choose 'Restart' under the dropdown menu.

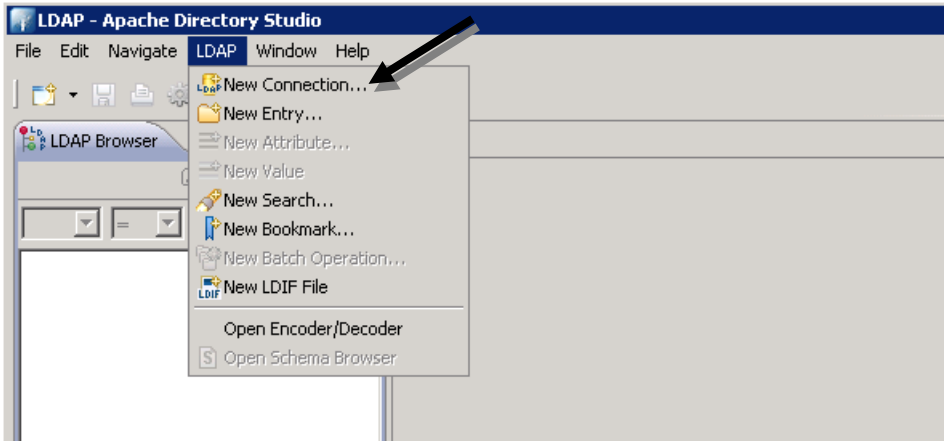

Services
File Action View Help
Services (Local)
Services (Local)
Apache Directory Server - default
Stop the service
Restart the service
Description:
Apache Directory Server - default
Name Description Status Startup Type Log On As
Apache Directory S... Started Automatic Local System
Application Experie... Automatic Local System
Application Informa... Local System
Application Layer G... Local Service
Application Manage... Manual Local System
Background Intellig... Automatic (D... Local System
Base Filtering Engine Automatic Local Service
Certificate Propaga... Manual Local System
CNG Key Isolation Manual Local System
COM+ Event System Automatic Local Service
COM+ System Appl... Manual Local System
Computer Browser Disabled Local System
Cryptographic Serv... Provides fo... Started Automatic Network S...
DCOM Server Proc... Provides la... Started Automatic Local System
Desktop Window M... Provides D... Started Automatic Local System
DHCP Client Registers a... Started Automatic Local Service
Diagnostic Policy Se... The Diagno... Started Automatic Local Service
Diagnostic Service ... The Diagno... Manual Local Service
Diagnostic System ... The Diagno... Started Manual Local System
Distributed Link Tra... Maintains li... Started Automatic Local System
Distributed Transac... Coordinate... Started Automatic (D... Network S...
DNS Client The DNS Cl... Started Automatic Network S...
DSM SA Connection... Provides a... Started Automatic Local System
DSM SA Data Mana... Provides a ... Started Automatic Local System
DSM SA Event Man... Provides O... Started Automatic Local System
Start
Stop
Pause
Resume
Restart
All Tasks
Refresh
Properties
Help
Extended Standard
Stop and Start service Apache Directory Server - default on Local Computer

VI. Change LDAP Admin Password

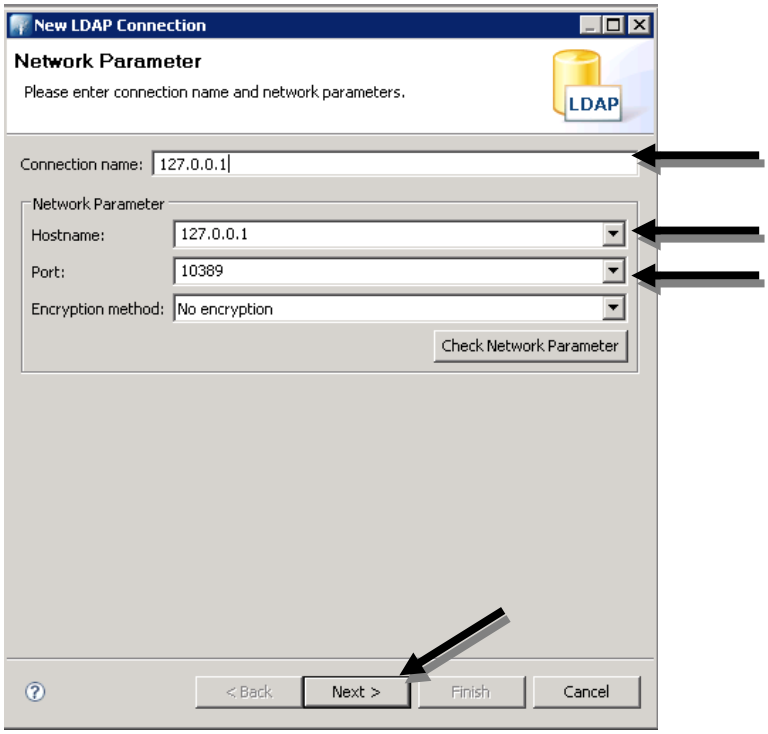
1. Open Apache Directory Studio by going under Start->All Programs->Apache Directory Studio-> Apache Directory Studio.
2. Click the 'Go to the Workbench' circle when the program loads.



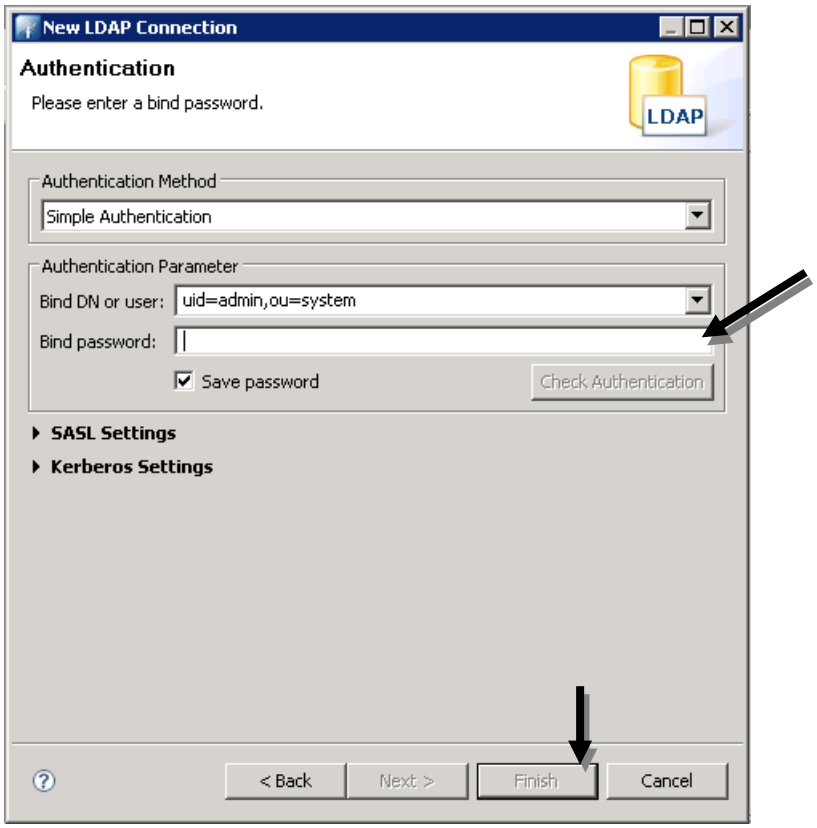
3. Next, create a new connection to localhost:10389. Go under the top menu bar 'LDAP'->'New Connection…'



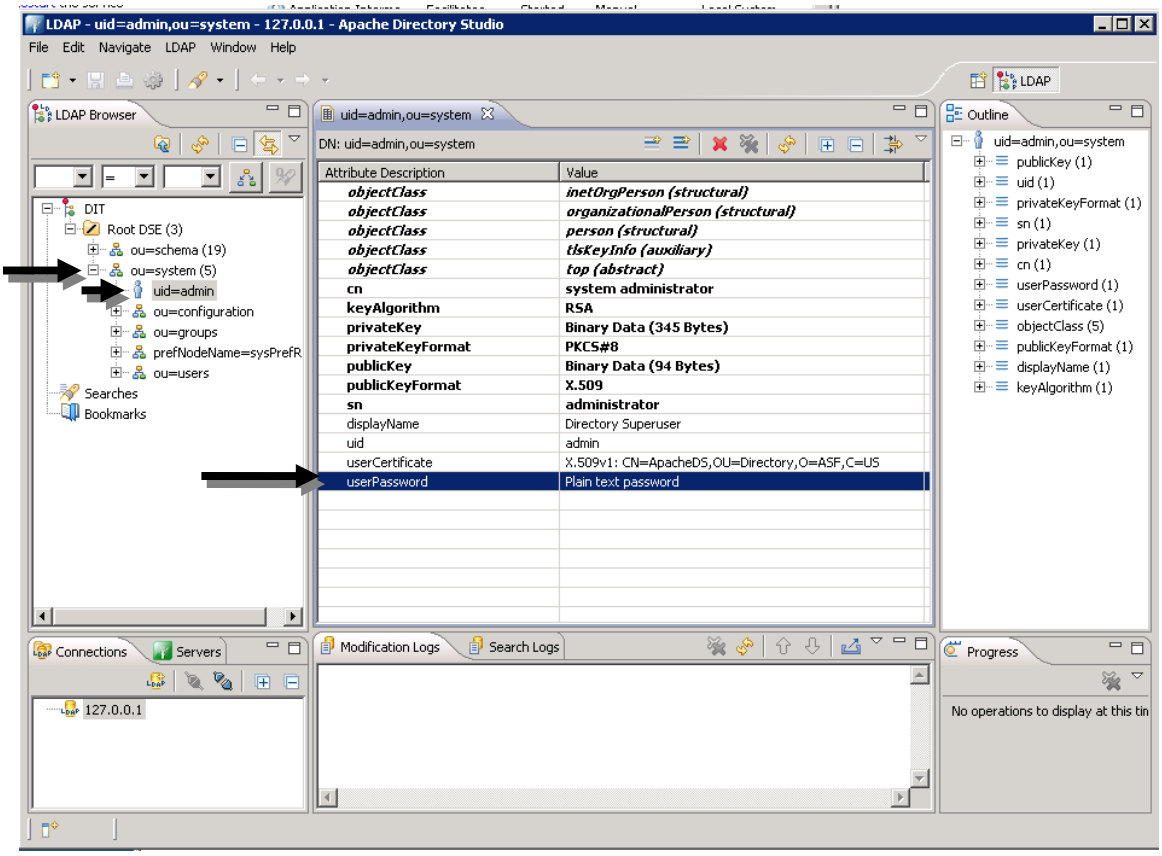
4. Set a ‘Connection Name’, ‘Hostname’, and ‘Port’. Choose ‘No encryption’ for the Encryption Method. Click ‘Next’.



5. Set the Bind DN or user to ‘uid=admin,ou=system’. If required the default Bind password is ‘secret’. Click ‘Finish’.

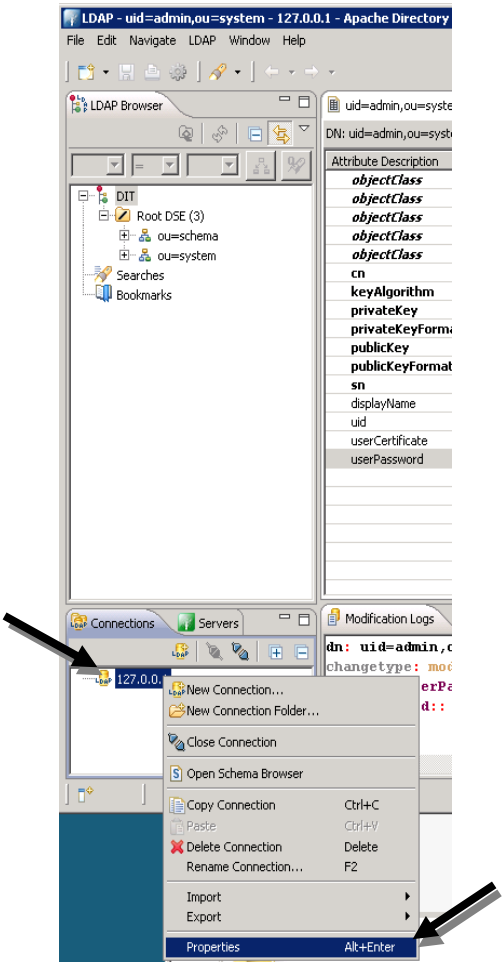


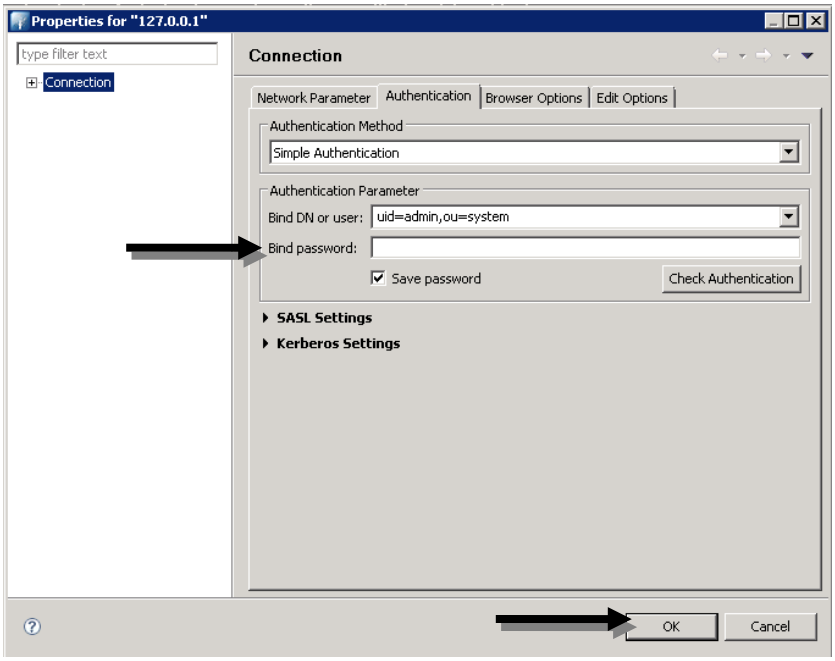
Expand the ‘ou=system’ tab and click on the uid=admin. Double-click on the ‘userPassword’ attribute in the attributes list that is displayed.



6. Go to the ‘New Password’ tab in the box that appears. This will be referred to in this guide as your ‘LDAP Password’. Click ‘Ok’ to save the password and exit the window.

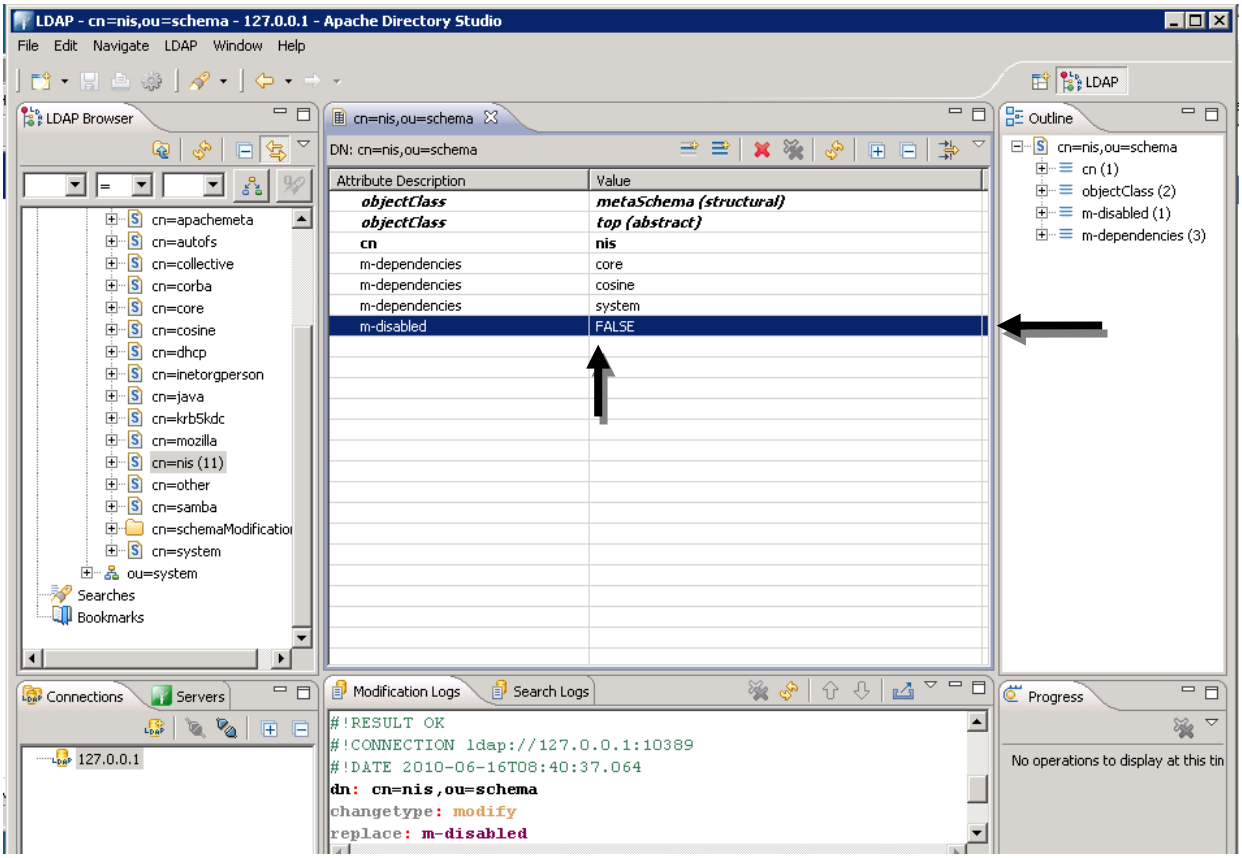
7. Right click on the server connection in the bottom left corner. Go to 'Properties' in the dropdown menu. Go to the 'Authentication' tab in the box that appears. Type your LDAP Password in the bind password box. Click 'Ok' to exit the window and save your changes.





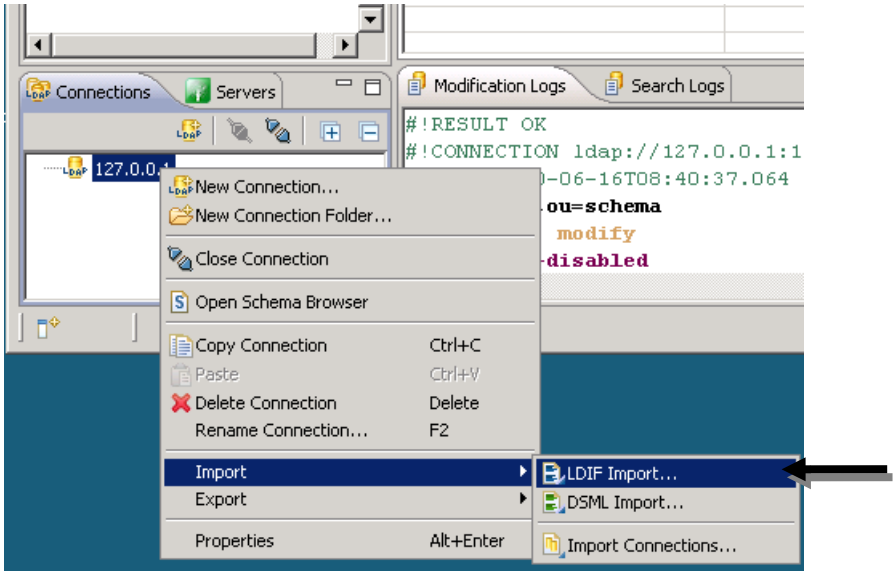
VII. Add NIS Schema

In Apache Directory Studio, expand the 'ou=schema' tab->double-click on the 'cn=nis' tab. In the attribute list that appears, click on the 'm-disabled' attribute and change the value from TRUE to 'FALSE' (by double-clicking TRUE and typing FALSE).

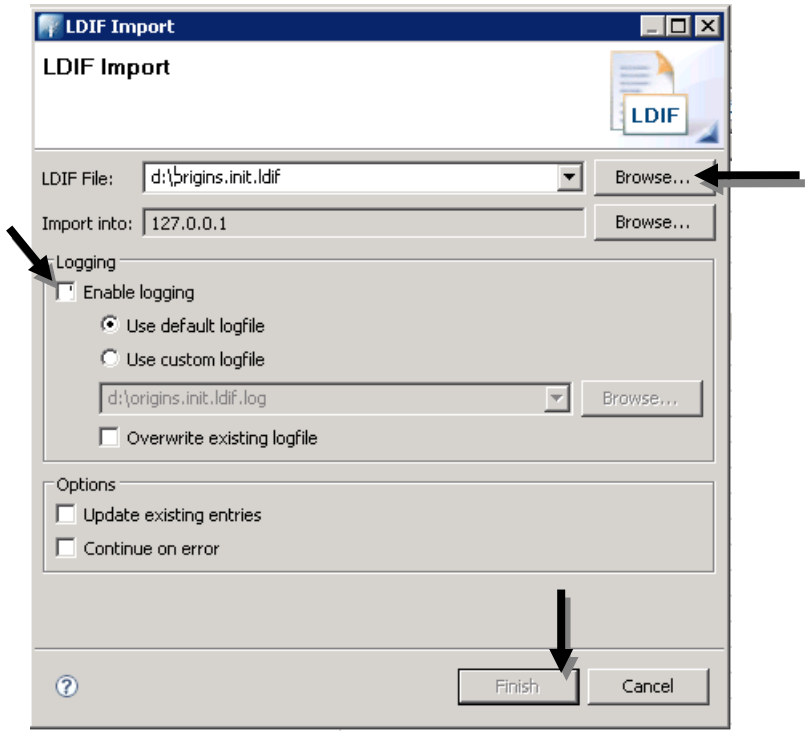


VIII. Populate LDAP

1. In Apache Directory Studio, right click on the connection in the 'Connections' tab in the bottom left hand corner.

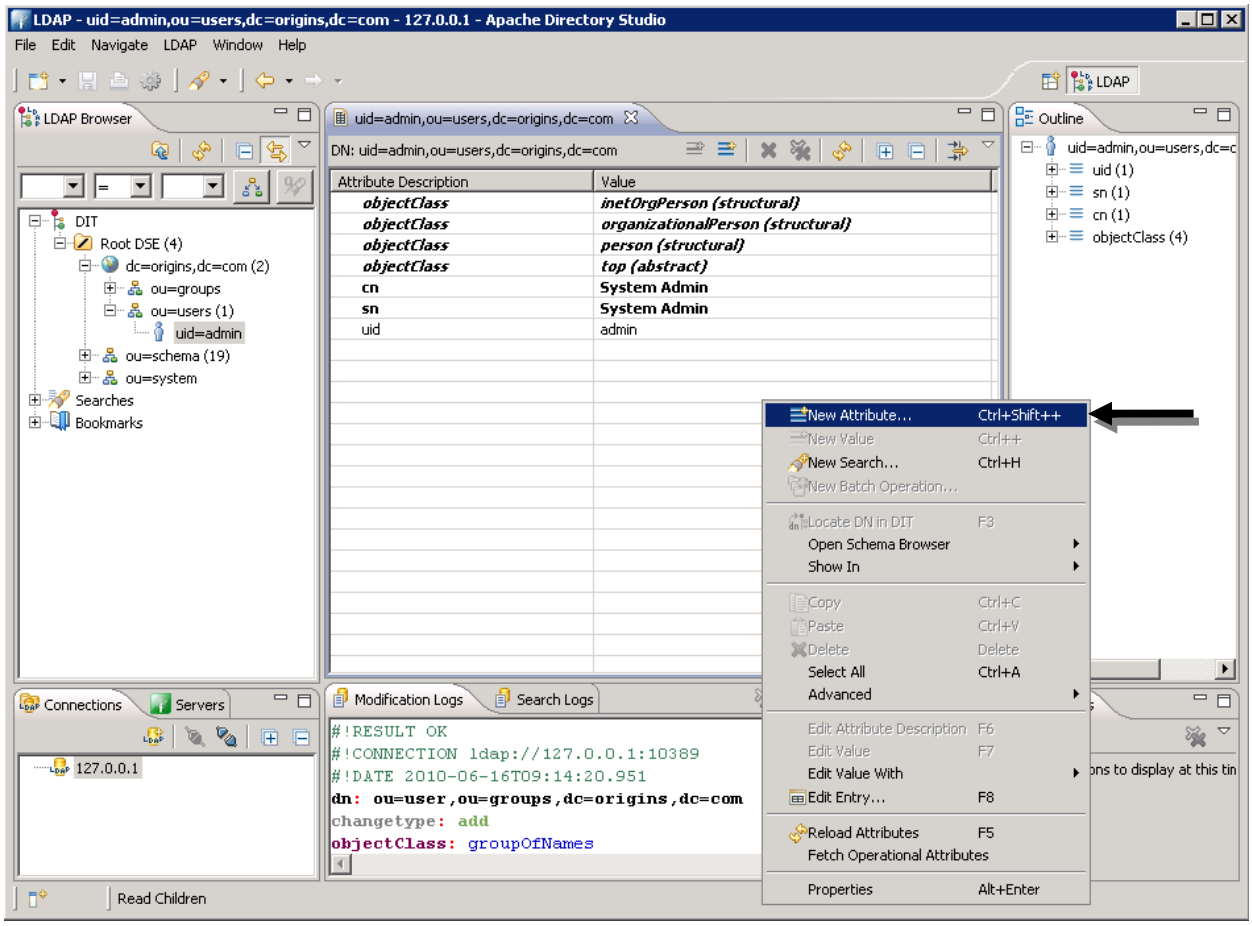


2. Choose Import->LDIF import from the dropdown menu. Browse for the origins.init.ldif file on your Installation CD. Uncheck the 'Enable Logging' option. Click 'Finish'.

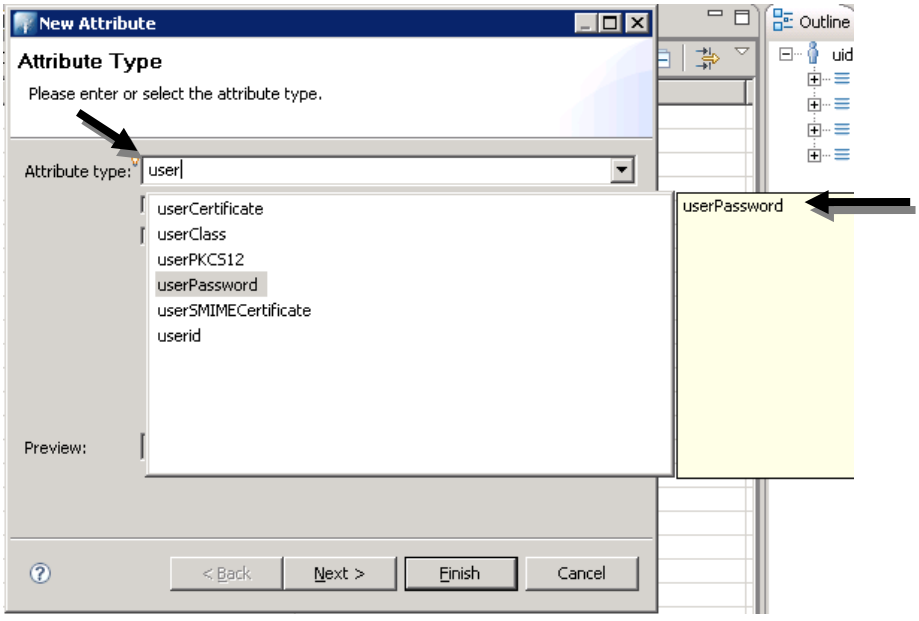


IX. Set the LPR system Admin Password

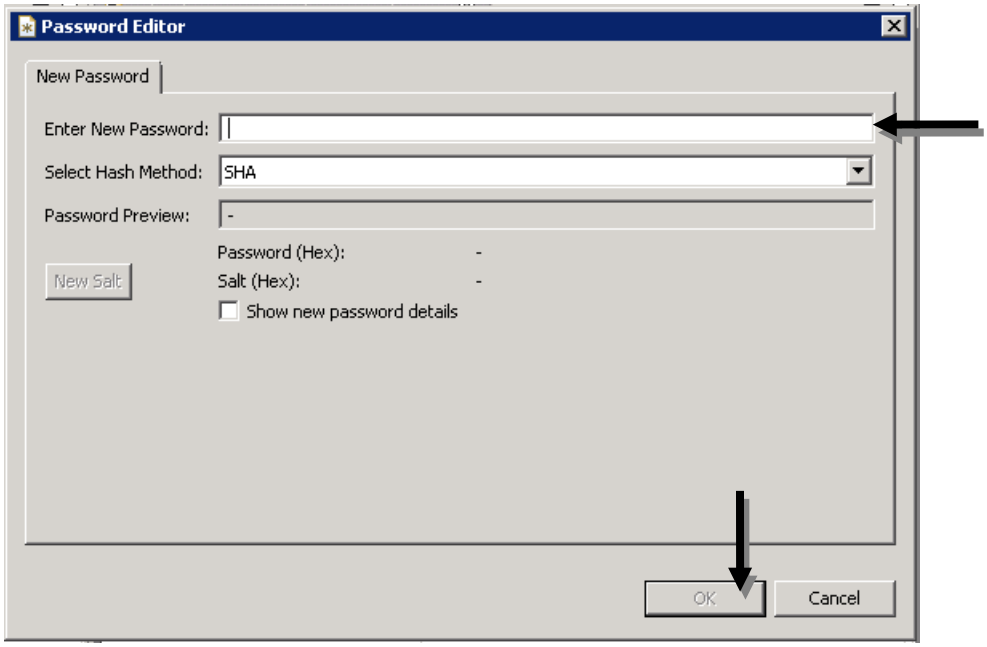
1. In Apache Directory Studio, expand the 'dc=origins,dc=com' tab. Expand the 'ou=users' tab and click on 'uid=admin'. Right click on the Attributes list and select 'New Attribute'.



2. Change the Attribute type to be 'userPassword'. Click 'Finish'.

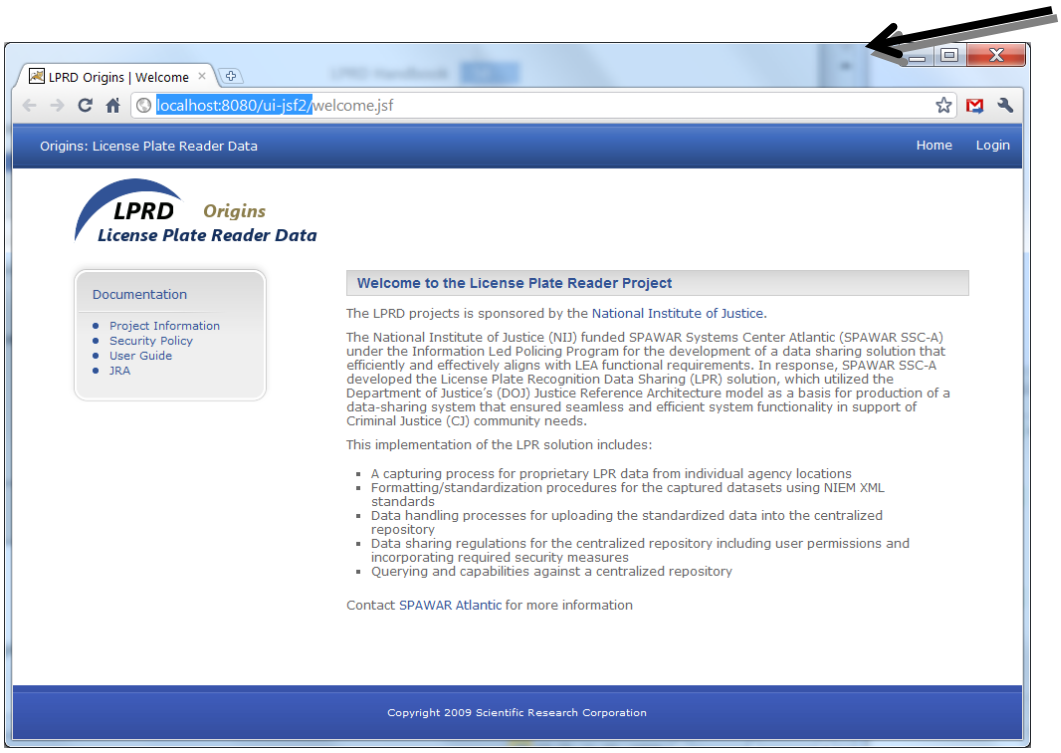


3. Enter a password in the Password Editor box that will pop up. Click 'Ok'. This will be your password for the 'admin' user when using the ui-jsf2 client.



X. Test Login

1. Visit http://localhost:8080/ui-jsf2/ and click the Login link:


LPRD Origins | Welcome
localhost:8080/ui-jsf2/welcome.jsf
Origins: License Plate Reader Data
Home
Login
LPRD Origins
License Plate Reader Data
Documentation
Project Information
Security Policy
User Guide
JRA
Welcome to the License Plate Reader Project
The LPRD projects is sponsored by the National Institute of Justice.
The National Institute of Justice (NIJ) funded SPAWAR Systems Center Atlantic (SPAWAR SSC-A) under the Information Led Policing Program for the development of a data sharing solution that efficiently and effectively aligns with LEA functional requirements. In response, SPAWAR SSC-A developed the License Plate Recognition Data Sharing (LPR) solution, which utilized the Department of Justice's (DOJ) Justice Reference Architecture model as a basis for production of a data-sharing system that ensured seamless and efficient system functionality in support of Criminal Justice (CJ) community needs.
This implementation of the LPR solution includes:
A capturing process for proprietary LPR data from individual agency locations
Formatting/standardization procedures for the captured datasets using NIEM XML standards
Data handling processes for uploading the standardized data into the centralized repository
Data sharing regulations for the centralized repository including user permissions and incorporating required security measures
Querying and capabilities against a centralized repository
Contact SPAWAR Atlantic for more information
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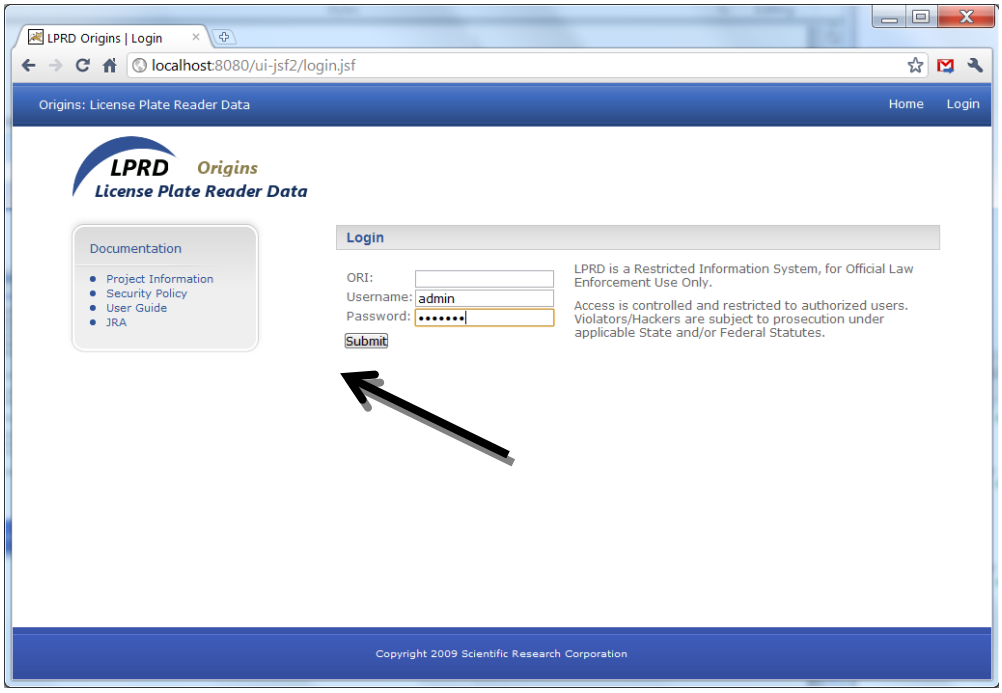
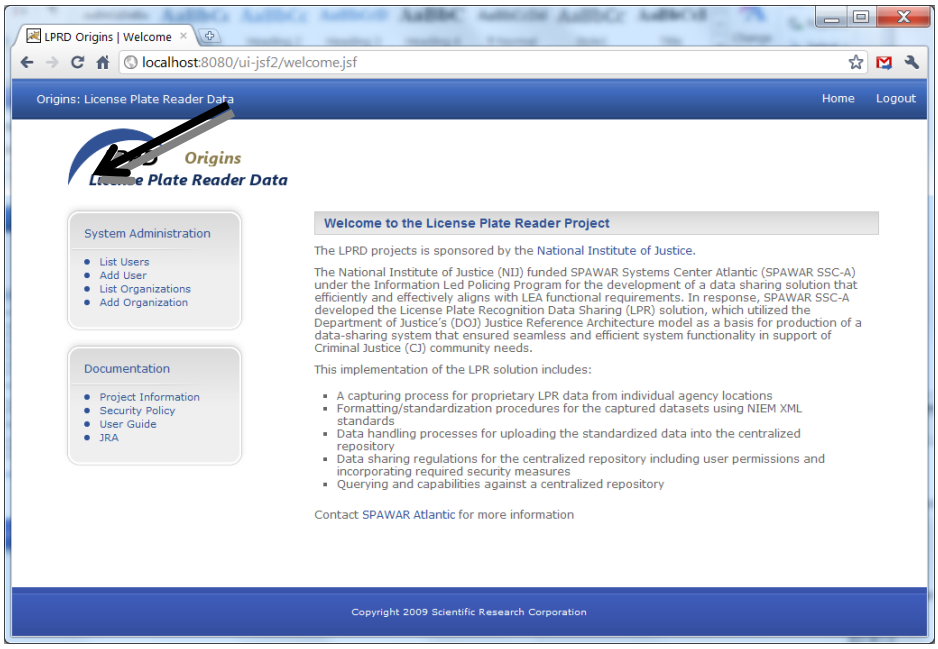
2. Log in by leaving ORI blank, user “admin”, and the password which you set in section IX.3. Click the Submit button:



3. You should now see the System Administrator’s menu on the left. For futher information on using the client, refer to the LPRD Agency User & Administrator Manual, later in this handbook:


LPRD Origins | Welcome
localhost:8080/ui-jsf2/welcome.jsf
Origins: License Plate Reader Data
Home
Logout
Origins
System Administration
List Users
Add User
List Organizations
Add Organization
Documentation
Project Information
Security Policy
User Guide
JRA
Welcome to the License Plate Reader Project
The LPRD projects is sponsored by the National Institute of Justice.
The National Institute of Justice (NIJ) funded SPAWAR Systems Center Atlantic (SPAWAR SSC-A) under the Information Led Policing Program for the development of a data sharing solution that efficiently and effectively aligns with LEA functional requirements. In response, SPAWAR SSC-A developed the License Plate Recognition Data Sharing (LPR) solution, which utilized the Department of Justice’s (DOJ) Justice Reference Architecture model as a basis for production of a data-sharing system that ensured seamless and efficient system functionality in support of Criminal Justice (CJ) community needs.
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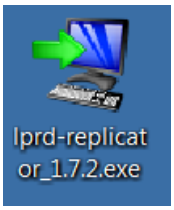
LPRD Replicator Installation Guide

Prerequisites

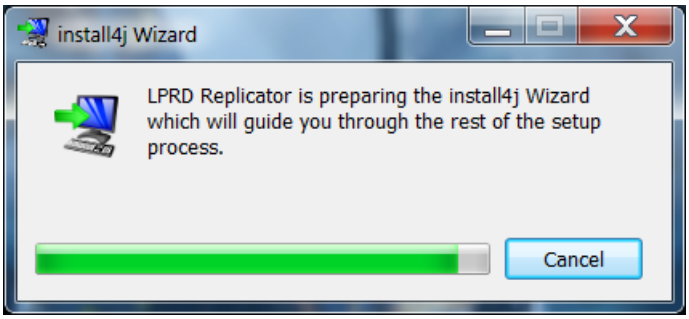
- You will need this information:
  - Your LPR Database name, username and password
  - Your agency's unique ORI
- Connectivity to the regional LPRD server. This will be provided to you by the regional LPRD server administrator.
- An account with Administrator access.

Installing the Replicator

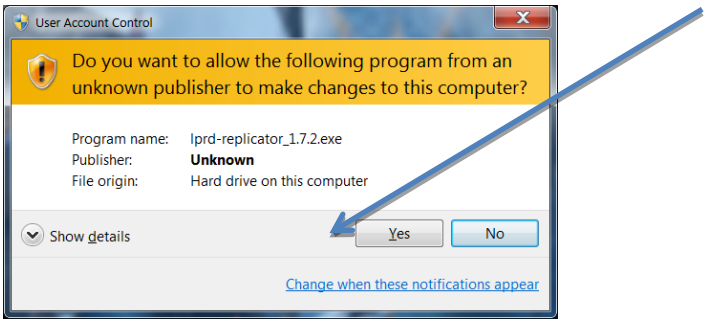
Browse to the installer file which is provided on your JLEIE Replicator Installation CD and double-click it:



Wait a moment as the installer prepares itself:


install4j Wizard
LPRD Replicator is preparing the install4j Wizard which will guide you through the rest of the setup process.
Cancel

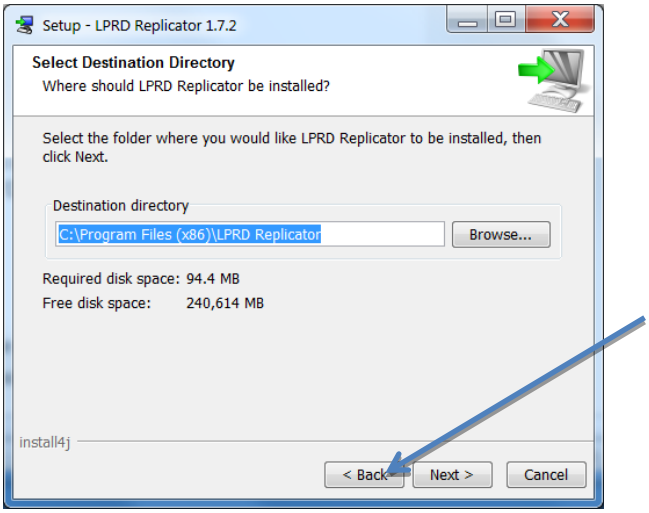
If a User Account Control window pops up, click "Yes":


User Account Control
Do you want to allow the following program from an unknown publisher to make changes to this computer?
Program name: lprd-replicator_1.7.2.exe
Publisher: Unknown
File origin: Hard drive on this computer
Show details
Yes
No
Change when these notifications appear

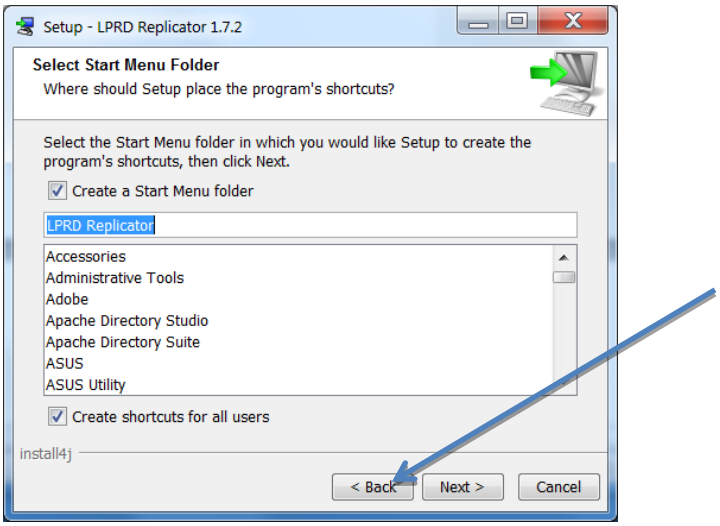
Click “Next” on the Welcome screen:

Setup - LPRD Replicator 1.7.2
Welcome to the LPRD Replicator Setup Wizard
This will install LPRD Replicator on your computer. The wizard will lead you step by step through the installation.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

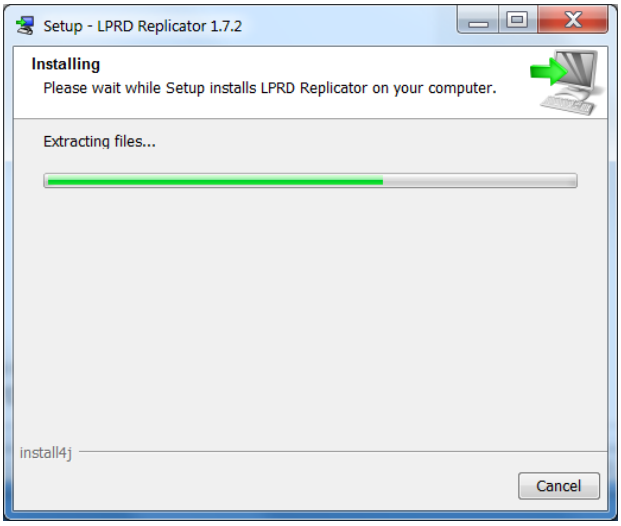
Click “Next” to accept the default installation folder:


Setup - LPRD Replicator 1.7.2
Select Destination Directory
Where should LPRD Replicator be installed?
Select the folder where you would like LPRD Replicator to be installed, then click Next.
Destination directory
C:\Program Files (x86)\LPRD Replicator
Browse...
Required disk space: 94.4 MB
Free disk space: 240,614 MB
install4j
< Back
Next >
Cancel

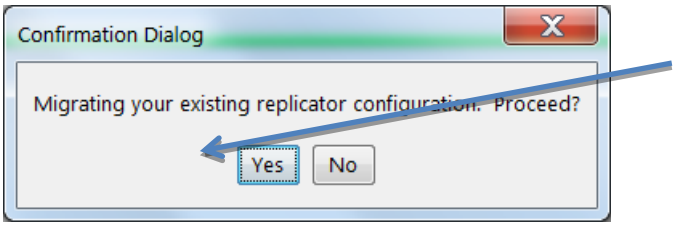
Click “Next” to accept the default Start Menu folder:



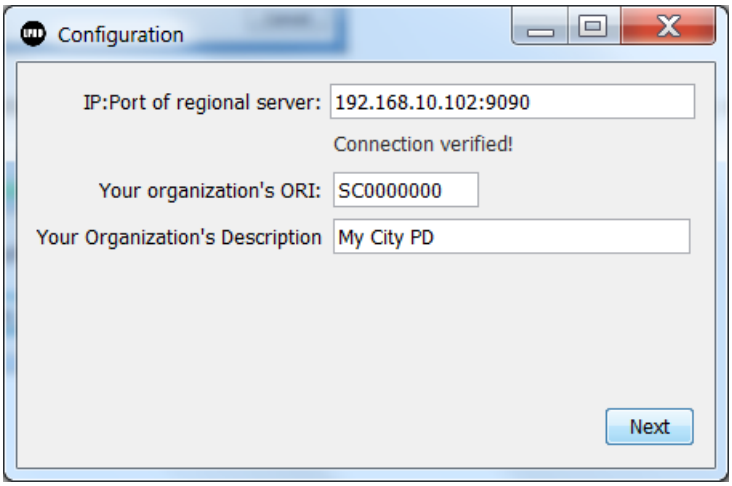
Wait a moment as the replicator is installed:



If you have an older installation and the replicator suggests migrating your existing configuration, click “Yes”:

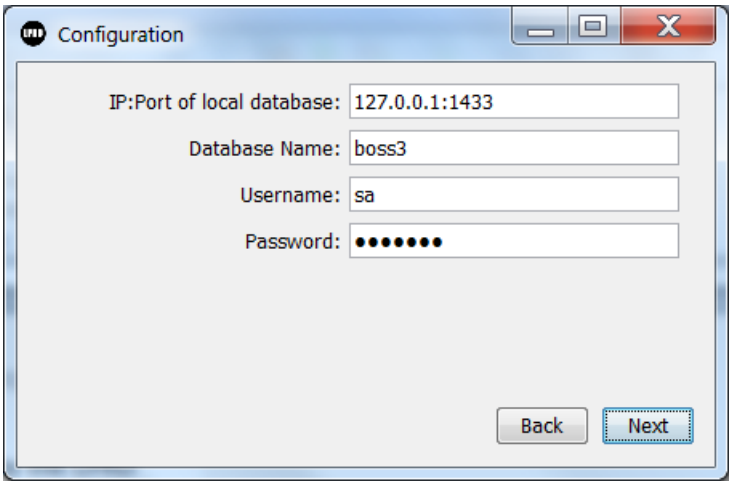


In the configuration window that pops up, fill in the required information. The IP:Port is provided to you by the LPRD administrator. Please be careful that you enter the correct ORI. The description is simply some text that describes your organization/agency. Then click Next:

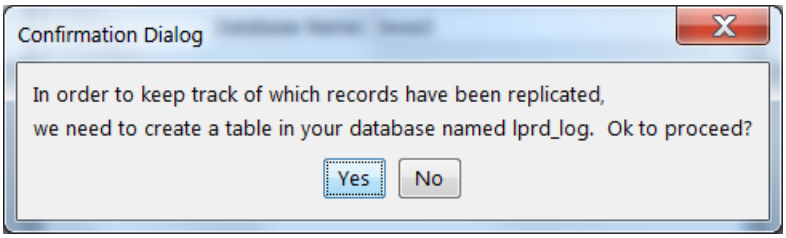


Note that if the installer cannot connect to the regional server, you will not be able to proceed. Expert users, if you insist on installing anyway, you can click Next 5 times to force the installer to proceed, but the replicator will not work if it cannot connect to the regional server.

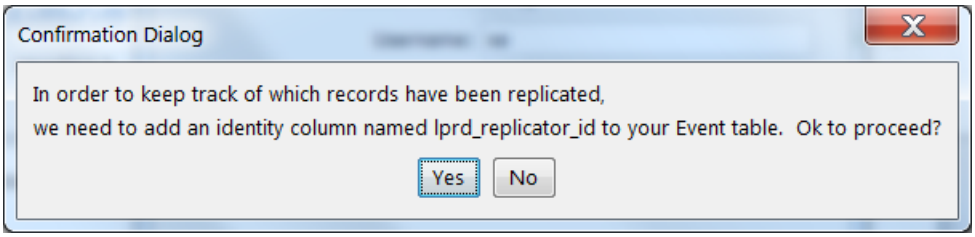
Now, enter the IP:Port of your local LPR database; the default, 127.0.0.1:1433, is generally correct. Also enter the database name where your LPR data is stored, a username with write access to that database, and a password, then click Next. There may be a brief pause after clicking Next while the configuration tool connects to your database to check connectivity and determine your LPR vendor:



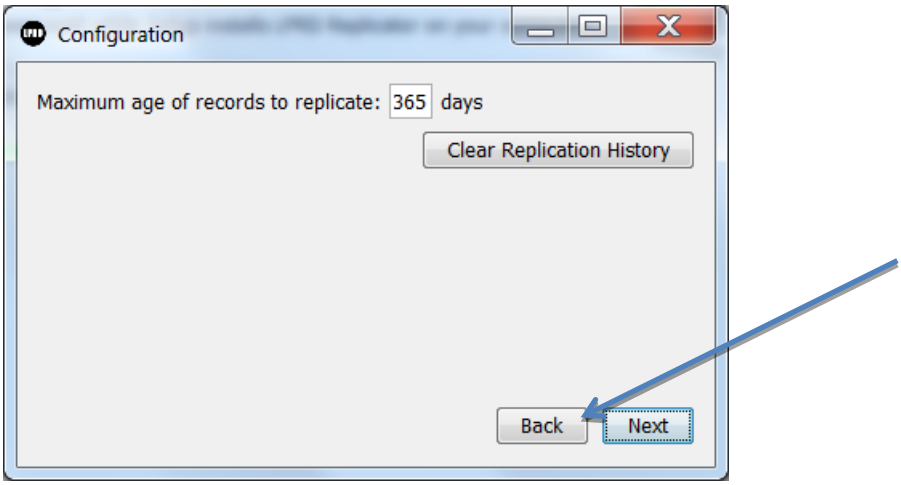
The replicator needs to create a table named lprd_log to keep track of which reads have been replicated. Click Yes to allow this:


Confirmation Dialog
In order to keep track of which records have been replicated,
we need to create a table in your database named lprd_log. Ok to proceed?
Yes
No

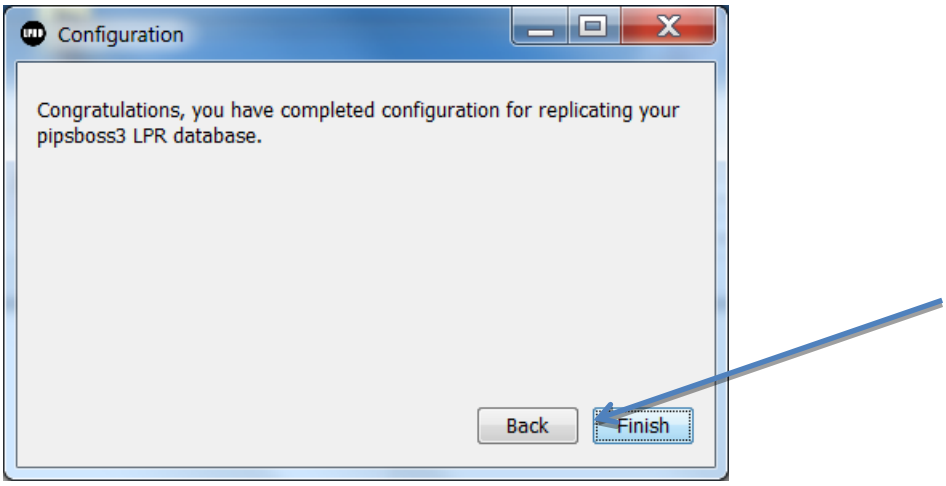
For some databases, the replicator needs to add an additional column to your LPR table. Click Yes to allow this:


Confirmation Dialog
In order to keep track of which records have been replicated,
we need to add an identity column named lprd_replicator_id to your Event table. Ok to proceed?
Yes
No

Select the maximum age of reads in order to be considered for replication. If you are upgrading a previous installation, you also have the ability to Clear Replication History. Do not clear the history unless you have reason to believe it is necessary. In most cases, simply click Next on this screen:



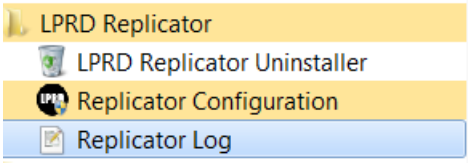
On the Configuration's finish screen, simply click Finish:



Click “Finish” to complete installation:

Setup - LPRD Replicator 1.7.2
Completing the LPRD Replicator Setup Wizard
Setup has finished installing LPRD Replicator on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Finish

Congratulations, that’s it! The LPRD Configuration tool, Uninstaller, and Log are now available in your Start Menu:



It is wise to click the Replicator Log option to ensure that everything looks good. Note that the log is now stored in %ProgramData%/LPRD Replicator/logs; the link will open that log in your default editor.

LPRD Agency User & Administration Manual

I. General Information

Introduction

Welcome to the License Plate Recognition Data (LPRD) User Manual. This manual provides users and administrators with a working knowledge of the License Plate Search and administrative functions. This allows users to operate the LPRD system in a daily working environment. This Manual is organized to give users and administrators a high-level understanding of each application and the steps necessary to operate the application to its fullest extent.

Basic System Overview

LPRD uses open-source software developed by SPAWAR to allow information to be shared across jurisdictional boundaries regardless of the structure of the underlying data sources. Using the various search functions, authorized agency users can search on set fields and view returned matching results in a pre-set format. The central database allows users to search for and view records of all of the contributing agencies. Users must have a valid user account and password to use the LPRD system.

In addition to performing queries, agency administrators will have a variety of responsibilities in LPRD operation. Agency administrators will generate agency user accounts and supply initial passwords for the LPRD system. They will be responsible for all of their agency's users and the particular role each user has within LPRD. Agency administrators can add, edit, and delete agency user accounts as needed to keep information current. Agency administrators will be the first people to handle any agency user issues. If an issue cannot be resolved, the agency administrator will be responsible for contacting the LPRD System Administrator for assistance.

II. Getting Started

Obtaining a User Account

To log in and use the LPRD system, users must have a valid user account and password. User accounts are obtained from the local agency Administrator. Contact the local agency Administrator for a valid username and password.

Launching the LPRD System

1. Open the web browser (e.g. Internet Explorer).
2. Type in the appropriate URL to open the Home screen (*see* Figure 1-1).

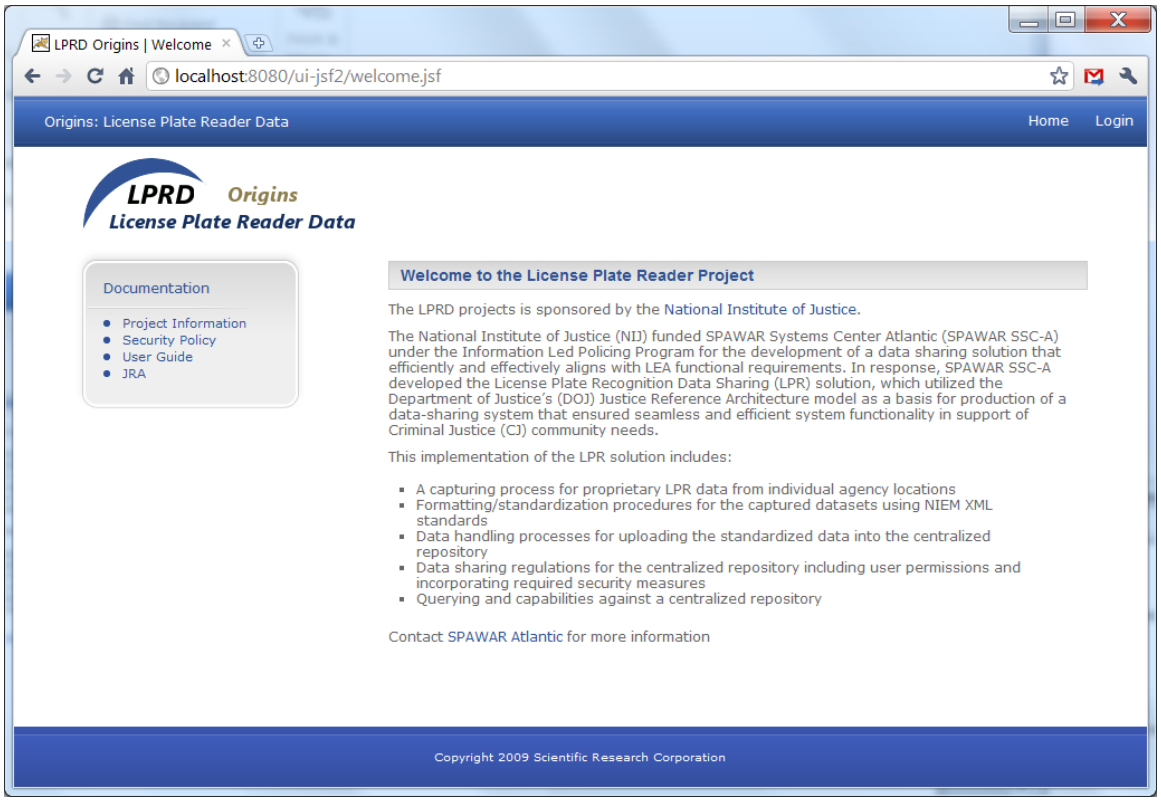

LPRD Origins | Welcome
localhost:8080/ui-jsf2/welcome.jsf
Origins: License Plate Reader Data
Home
Login
LPRD Origins
License Plate Reader Data
Documentation
Project Information
Security Policy
User Guide
JRA
Welcome to the License Plate Reader Project
The LPRD projects is sponsored by the National Institute of Justice.
The National Institute of Justice (NIJ) funded SPAWAR Systems Center Atlantic (SPAWAR SSC-A) under the Information Led Policing Program for the development of a data sharing solution that efficiently and effectively aligns with LEA functional requirements. In response, SPAWAR SSC-A developed the License Plate Recognition Data Sharing (LPR) solution, which utilized the Department of Justice's (DOJ) Justice Reference Architecture model as a basis for production of a data-sharing system that ensured seamless and efficient system functionality in support of Criminal Justice (CJ) community needs.
This implementation of the LPR solution includes:
A capturing process for proprietary LPR data from individual agency locations
Formatting/standardization procedures for the captured datasets using NIEM XML standards
Data handling processes for uploading the standardized data into the centralized repository
Data sharing regulations for the centralized repository including user permissions and incorporating required security measures
Querying and capabilities against a centralized repository
Contact SPAWAR Atlantic for more information
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Figure 1-1. LPRD Home Screen

Logging In

1. Click the Login link in upper right corner of the Home Screen to bring up the Login Screen (*see* Figure 1-2), begin typing your ORI and select the correct one. Then, enter the username and password previously assigned by the local Agency Administrator.

*Note: Passwords **are** case sensitive. Usernames are not case sensitive.*

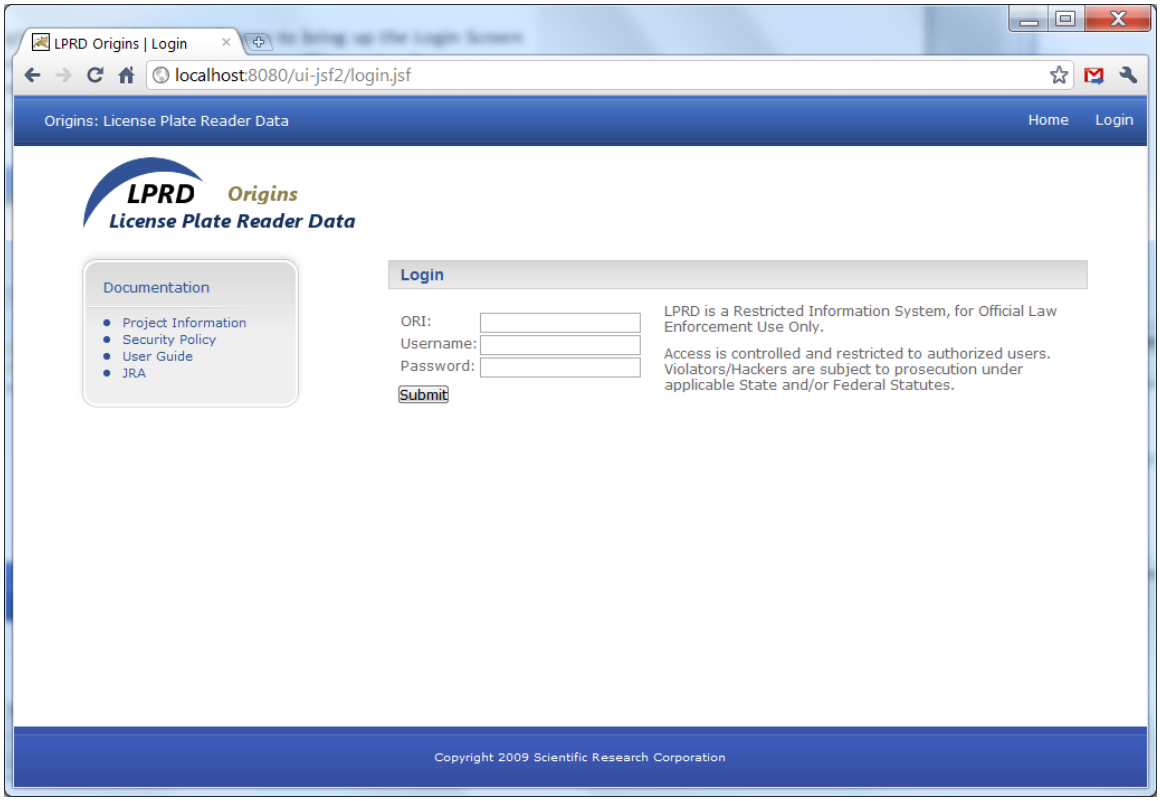

Figure 1-2. LPRD Login Screen

2. Click **SUBMIT** to log into the LPRD system. The username and password will then be validated against the authentication mechanism.

   Contact the local Agency Administrator if you have any problems logging in.

3. After logging in, the LPRD welcome screen appears, and you will see a new menu on the left (*see* Figure 1-3).

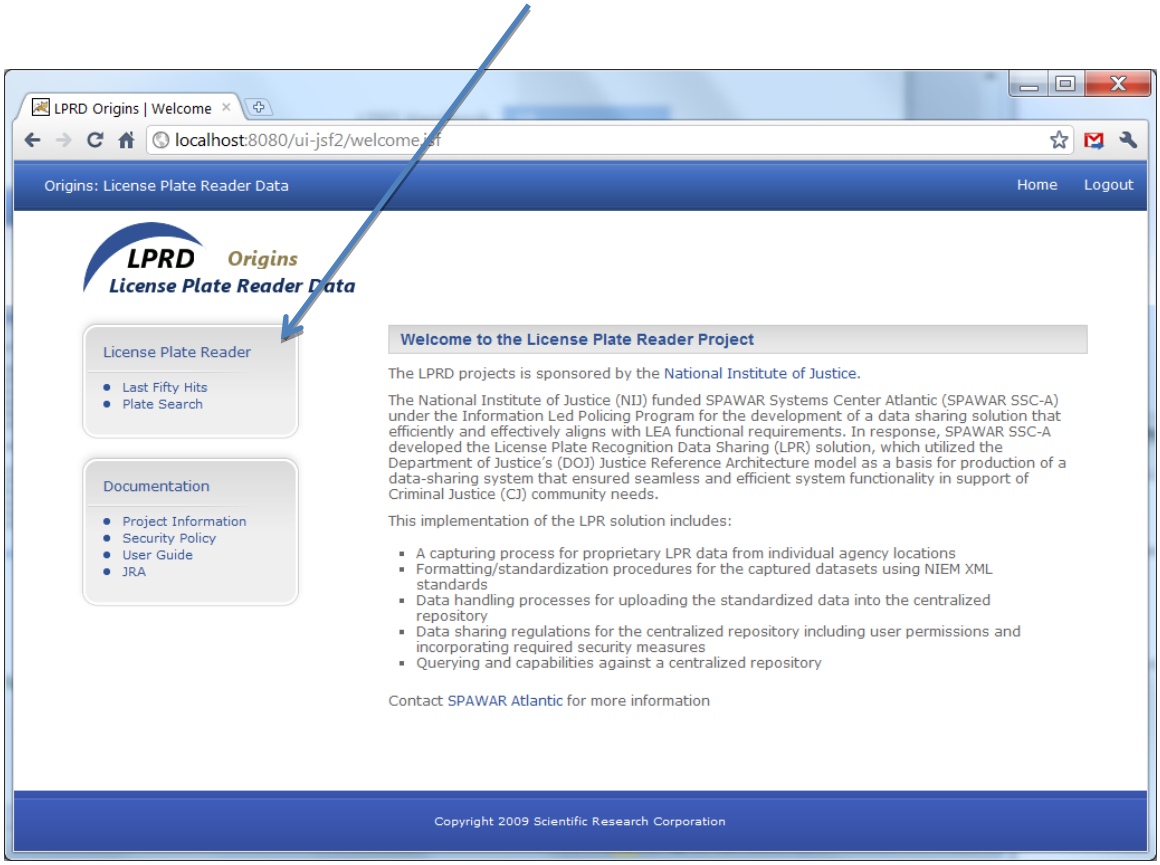
LPRD Origins | Welcome
localhost:8080/ui-jsf2/welcome.jsf
Origins: License Plate Reader Data
Home
Logout
LPRD Origins
License Plate Reader Data
License Plate Reader
Last Fifty Hits
Plate Search
Documentation
Project Information
Security Policy
User Guide
JRA
Welcome to the License Plate Reader Project
The LPRD projects is sponsored by the National Institute of Justice.
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Figure 1-3. LPRD Welcome screen

III. LPRD Searches

Last Fifty Hits

1. By clicking on the Last Fifty Hits link in the left menu, users can view the last 50 license plates that were loaded into the system using the Platescan XML file with pictures and the proper longitude and latitude coordinates (*see* Figure 2-1).

   By default the page size is set to 10 license plates per page, and the user has the option of changing the results per page to either 25 or 50.

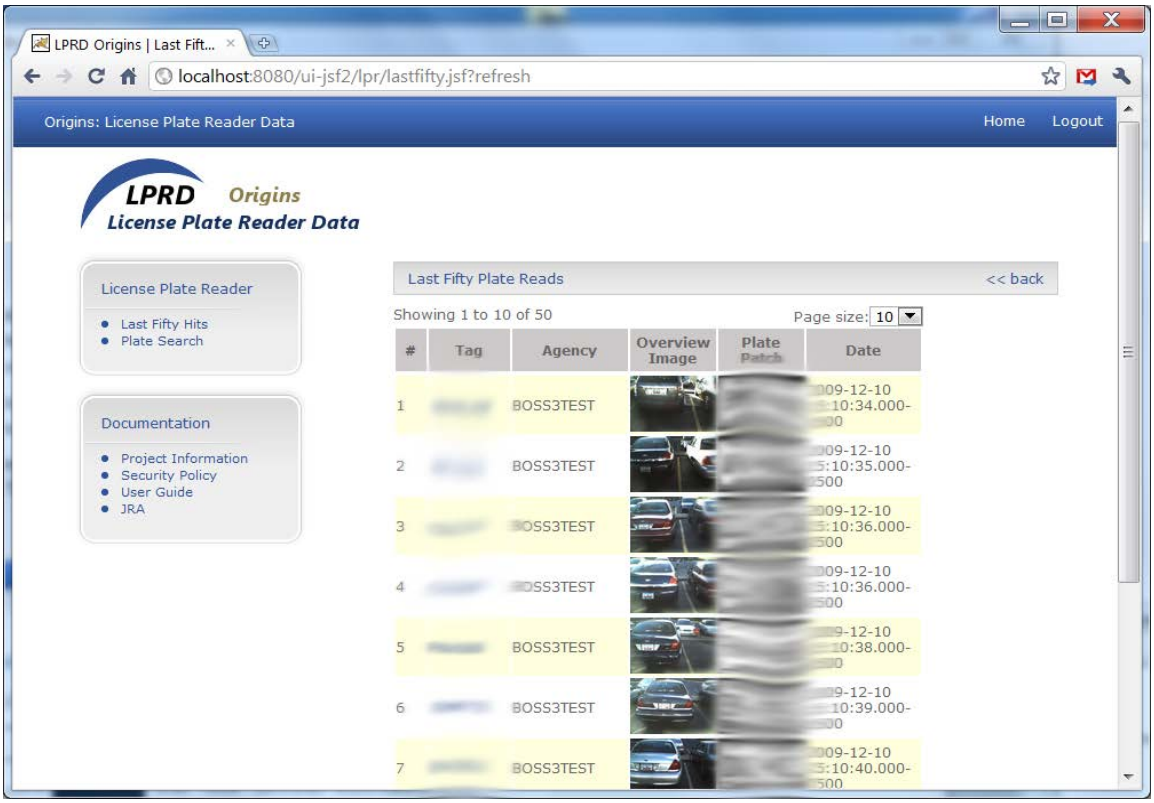

Figure 2-1. LPRD Last Fifty Hits screen

2. Users can click on any plate link in the results window to bring up that particular plate's activity data page (*see* Figure 2-2). The Latitude and Longitude coordinates populate a marker on a map powered by OpenStreetMaps located to the right of or below the activity data. If more than one Activity Date exists than each activity will have its own location marker on the map. You can click on the marker on the list to the left to center the map on that location.

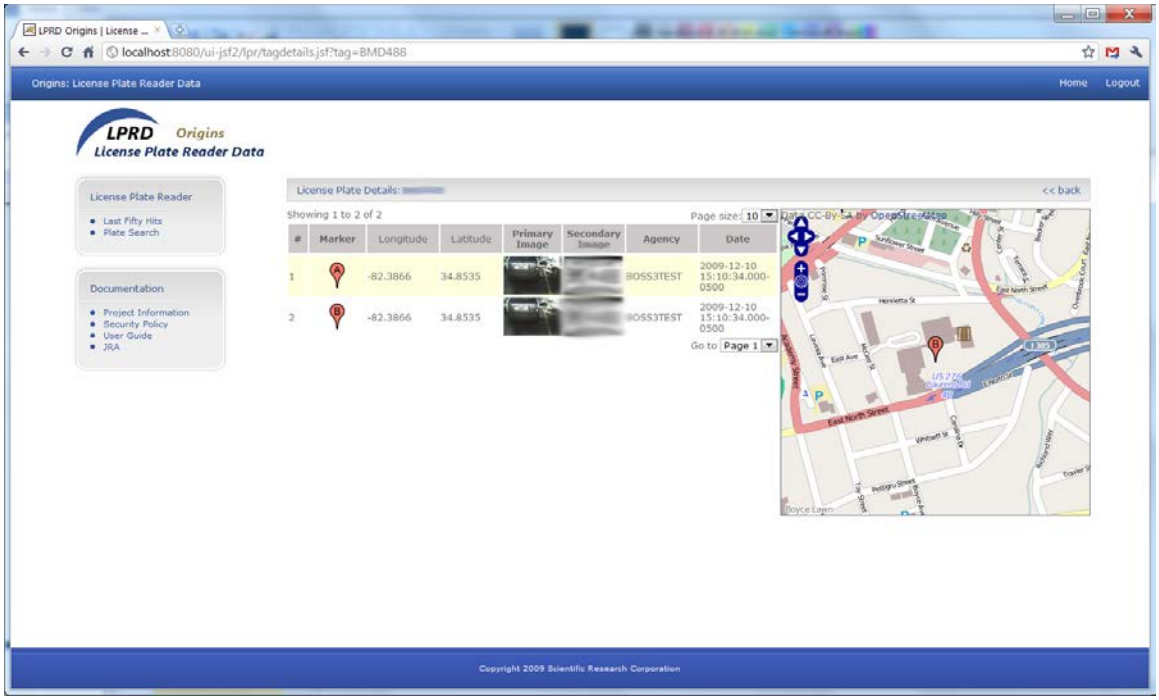

Figure 2-2. LPRD License Plate Details screen

Plate Search

Users may perform a Plate Search against the LPRD central database. The system queries these data sources using the information entered on the Search screen and then returns matching records on the Search Results screen (*see* Figure 3-1).

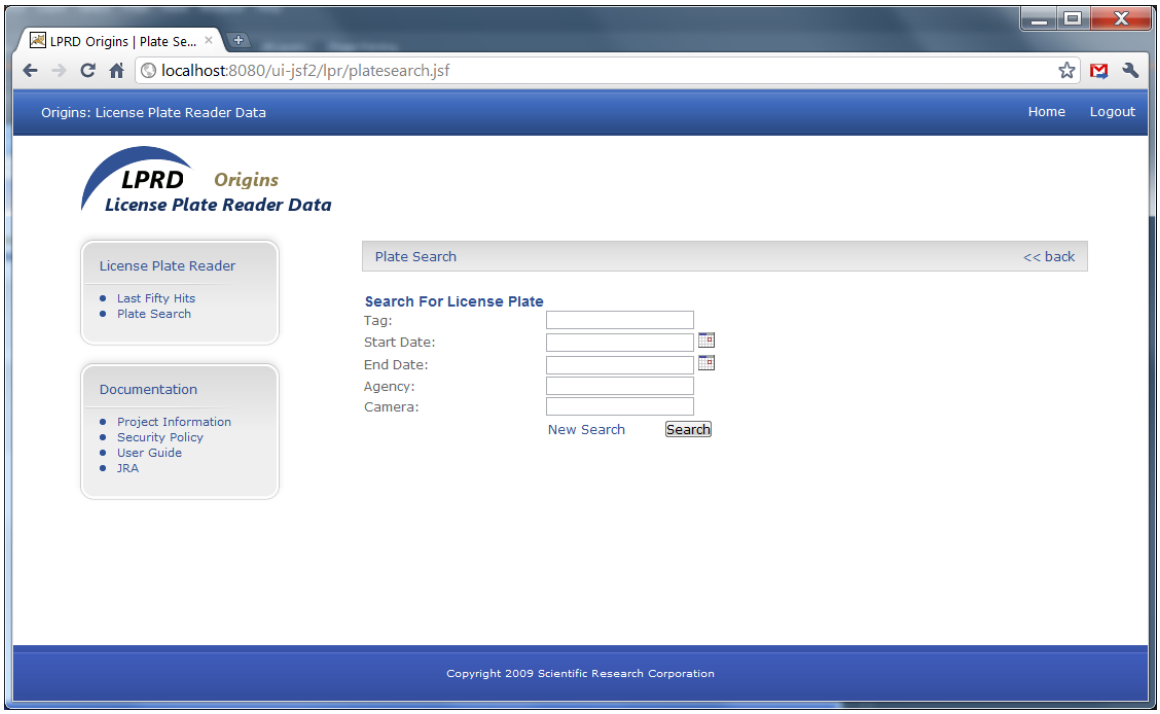

Figure 3-1. LPRD Plate Search screen

Clicking inside the After this Date and Before this Date text boxes will bring up a calendar that allows the user to select dates to search from, until, and during when activities might have taken place for a particular license plate (*see* Figure 3-2).

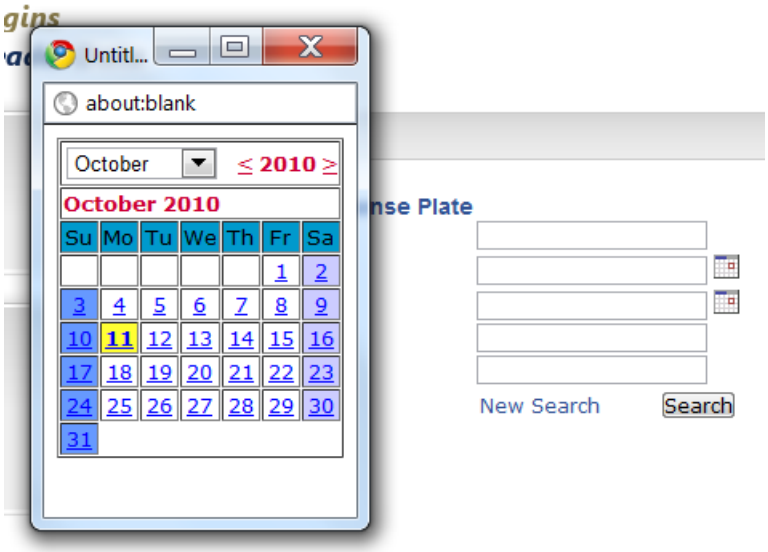

Figure 3-2. LPRD Plate Search screen with calendar drop down

Using Wildcards

Wildcards may be used in multiple ways to find valuable information stored in the LPRD system. Agency users can use the standard wildcard symbol, the percent sign (%). The percent sign represents zero or more characters that are unknown at the time of the query. For example, the query for 307% (*see* Figure 3-3) will return results like 307AAA, 307ABC, 307CCC, etc.

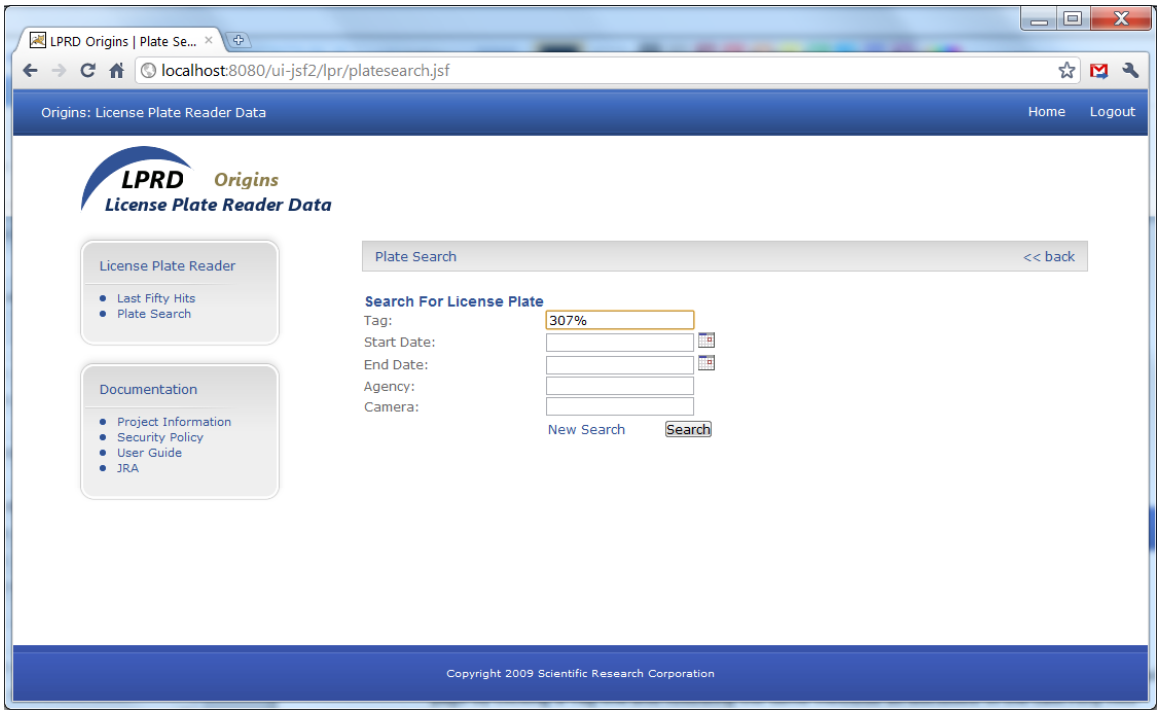

Figure 3-3. LPRD Plate Search screen using % sign

When your search returns multiple results, the user has the option to view a License Pate Details page by clicking a Tag link and following the same methods as discussed in the Last Fifty Hits section above.

IV. Agency Administration Functions

In addition to performing queries, an agency administrator can list, add, edit, and/or delete user accounts that are within their agency only. They can also perform user audits on users that are within their agency only.

Logging In

1. Click the Login link in upper right corner of the Home Screen to bring up the Login Screen (*see* Figure 5-1), begin typing your Agency ORI, along with your Agency Administrator username and password.

Note: When logging in as an agency administrator, the agency ORI is entered.
*Note: Passwords **are** case sensitive. Usernames are not case sensitive.*

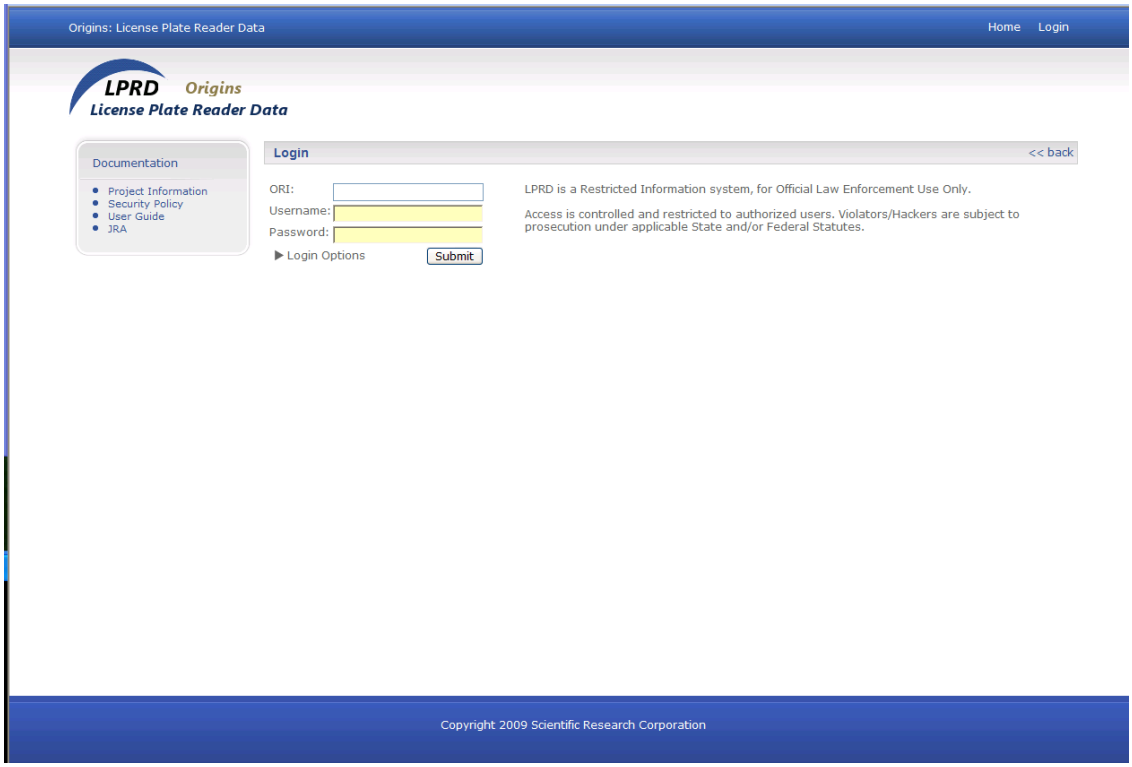

Figure 5-1. LPRD Login Screen

2. Click **SUBMIT** to log into the LPRD system. The username and password will then be validated against the authentication mechanism.
3. After logging in, the LPRD welcome Agency Administrator screen appears (*see* Figure 5-2).

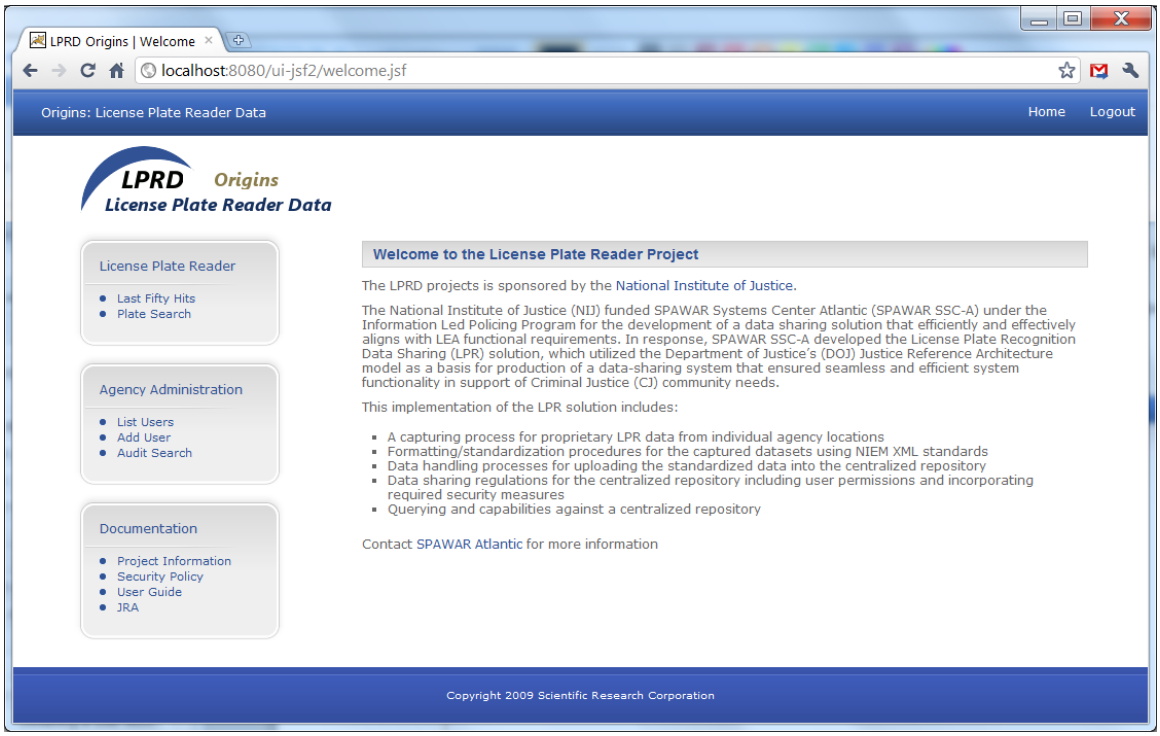
LPRD Origins | Welcome
localhost:8080/ui-jsf2/welcome.jsf
Origins: License Plate Reader Data
Home
Logout
LPRD Origins
License Plate Reader Data
License Plate Reader
Last Fifty Hits
Plate Search
Agency Administration
List Users
Add User
Audit Search
Documentation
Project Information
Security Policy
User Guide
JRA
Welcome to the License Plate Reader Project
The LPRD projects is sponsored by the National Institute of Justice.
The National Institute of Justice (NIJ) funded SPAWAR Systems Center Atlantic (SPAWAR SSC-A) under the Information Led Policing Program for the development of a data sharing solution that efficiently and effectively aligns with LEA functional requirements. In response, SPAWAR SSC-A developed the License Plate Recognition Data Sharing (LPR) solution, which utilized the Department of Justice's (DOJ) Justice Reference Architecture model as a basis for production of a data-sharing system that ensured seamless and efficient system functionality in support of Criminal Justice (CJ) community needs.
This implementation of the LPR solution includes:
A capturing process for proprietary LPR data from individual agency locations
Formatting/standardization procedures for the captured datasets using NIEM XML standards
Data handling processes for uploading the standardized data into the centralized repository
Data sharing regulations for the centralized repository including user permissions and incorporating required security measures
Querying and capabilities against a centralized repository
Contact SPAWAR Atlantic for more information
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Figure 5-2. LPRD Admin Welcome Screen

List Users

To view a list of your agency users, click the **List Users** link on the left side of the screen under Agency Administration menu box to access the List Users page (*see* Figure 5-3).

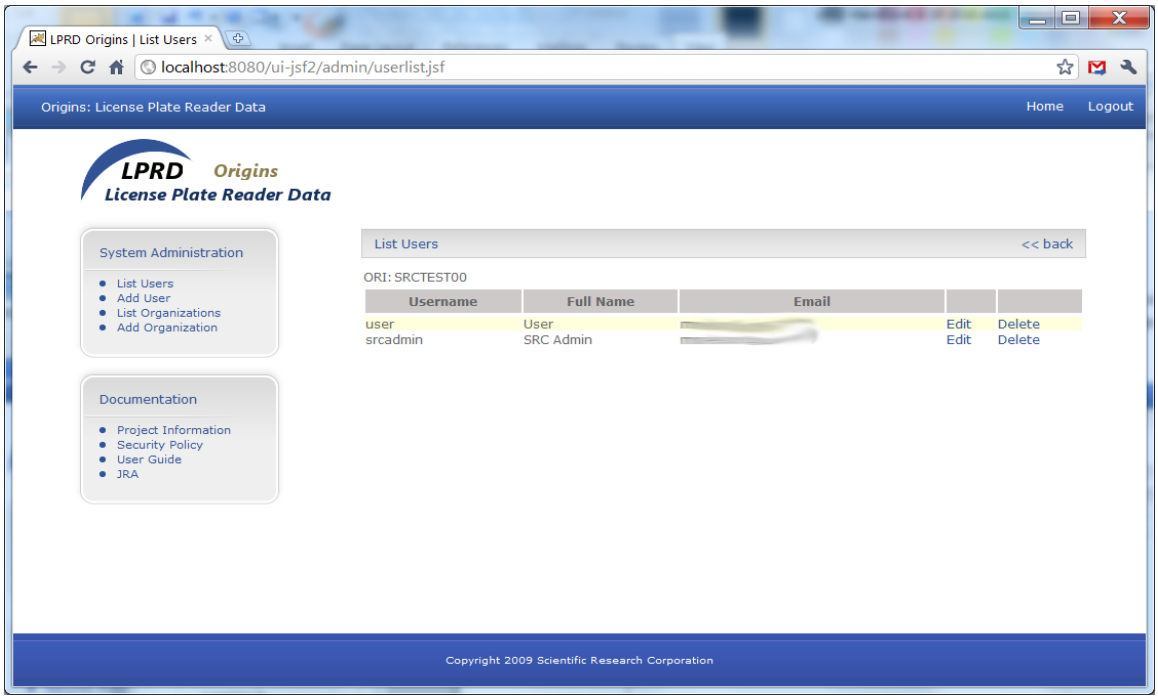

Figure 5-3. LPRD List Users Screen

Add User

1. To add a user to your agency, click the **Add User** link on the left side of the page under Agency Administration menu box to access the Add User page (*see* Figure 6-1).

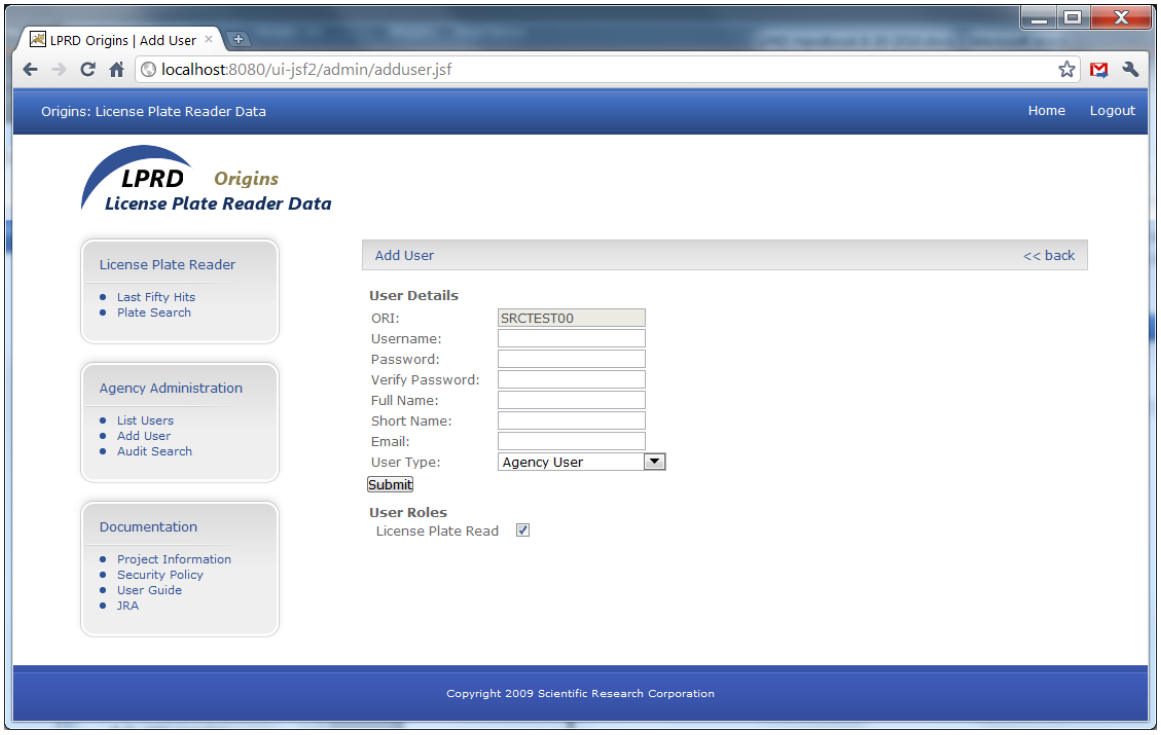

Figure 6-1. Add User Page

2. Complete the below fields on the Add User page. Table 6-1 outlines these fields.

Table 6-1. Add User Page Fields

FIELD	DESCRIPTION/OPTIONS
ORI	ORI is auto-assigned.
Username	Enter the username for the new user. Usernames may not contain a space at the beginning or end of the string, a special character (i.e. # % &), or any of the following characters: , ; ‘ “ + \ < >
Password	Assign a password for the username. Passwords must contain at least eight characters, including an upper and lower case alphabetical character, a number, and a special character (i.e. @ # *). Passwords are case sensitive.

Table 6-1. Add User Page Fields

FIELD	DESCRIPTION/OPTIONS
Confirm Password	Retype the password entered in the Password field. Remember, passwords are case sensitive.
Full Name	Enter the user's first, middle, and last name.
Short Name	Enter the user's short name.
Email	Enter the user's email address.
User Type	• Select the appropriate user type by clicking on the drop down box. • Agency User – This user has query and limited administration privileges (change password). This value is selected by default. • Agency Administrator – • System Administrator –

3. Click **SUBMIT** to save the new user account.

Note: Users accounts can only be created for the agency of the agency administrator. Agency administrators cannot add user accounts for other agencies.

Edit User

1. Click the List Users link to bring up your agency users, and click Edit link to the right of the user's information to display the Edit User screen (*see* Figure 6-2).

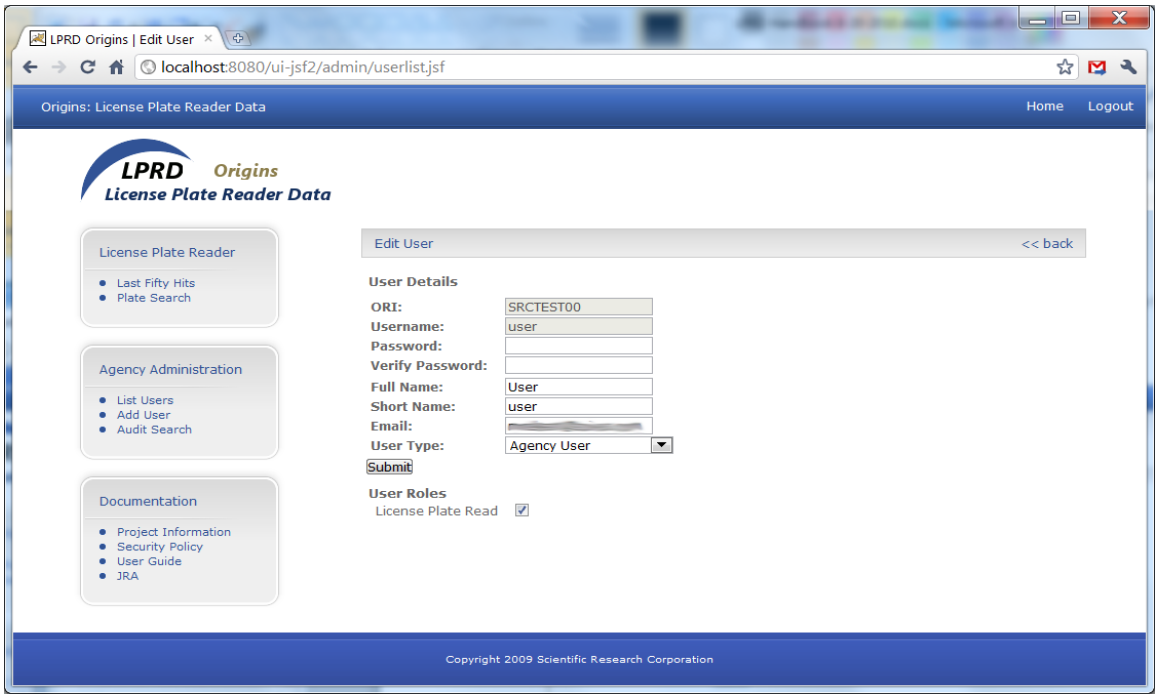

Figure 6-2. LPRD Edit Users Screen

2. The agency administrator can edit a user's Password, Full Name, Short Name, Email, or User Type. The administrator can also assign or unassign access to any of the available modules by clicking the check box to the right of the module name.
3. Click **Submit** to save changes.

Delete User

1. Click the List Users link to bring up your agency users, and click the Delete link to the right of the user's information to delete a user.

User Audits

The Agency Administrator can perform an Audit Search of all Users in their agency to see what each User has searched (*see* Figure 7-1).

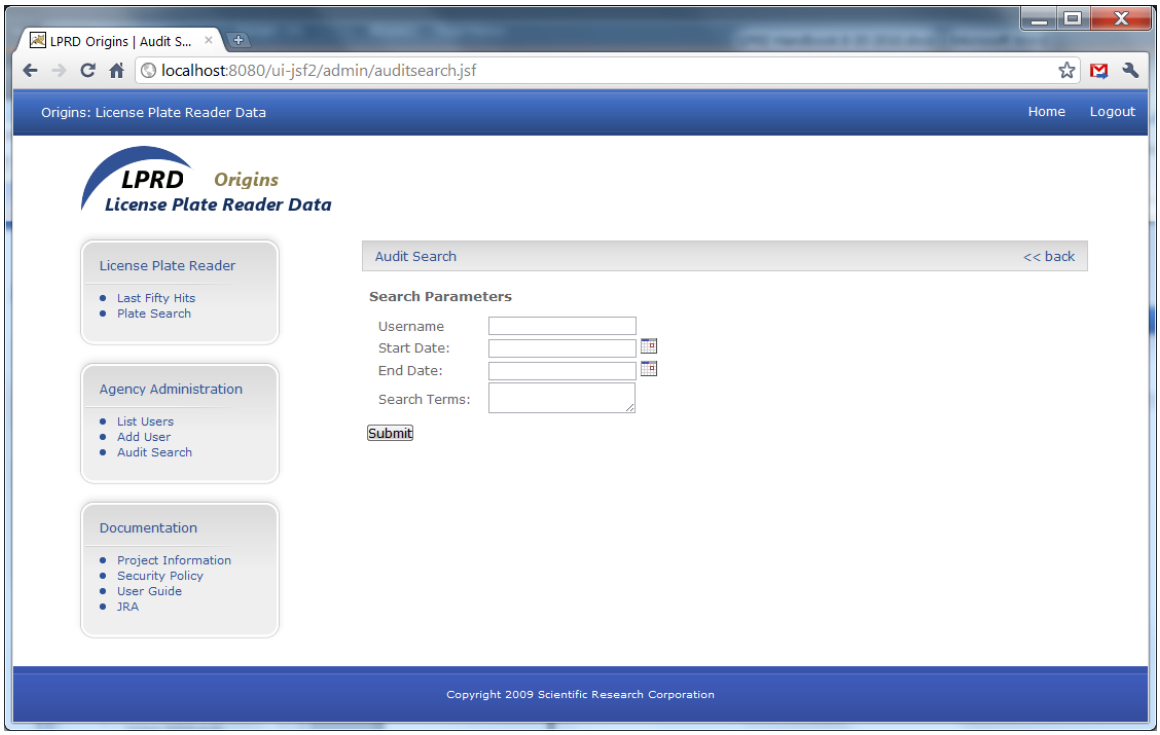

Figure 7-1. LPRD Audit Search Screen

1. Enter an Agency User's User Name in the User Name text box.
2. Click **SUBMIT**, and this will return all searches performed by this User since they were added to the system (*see* Figure 7-2).

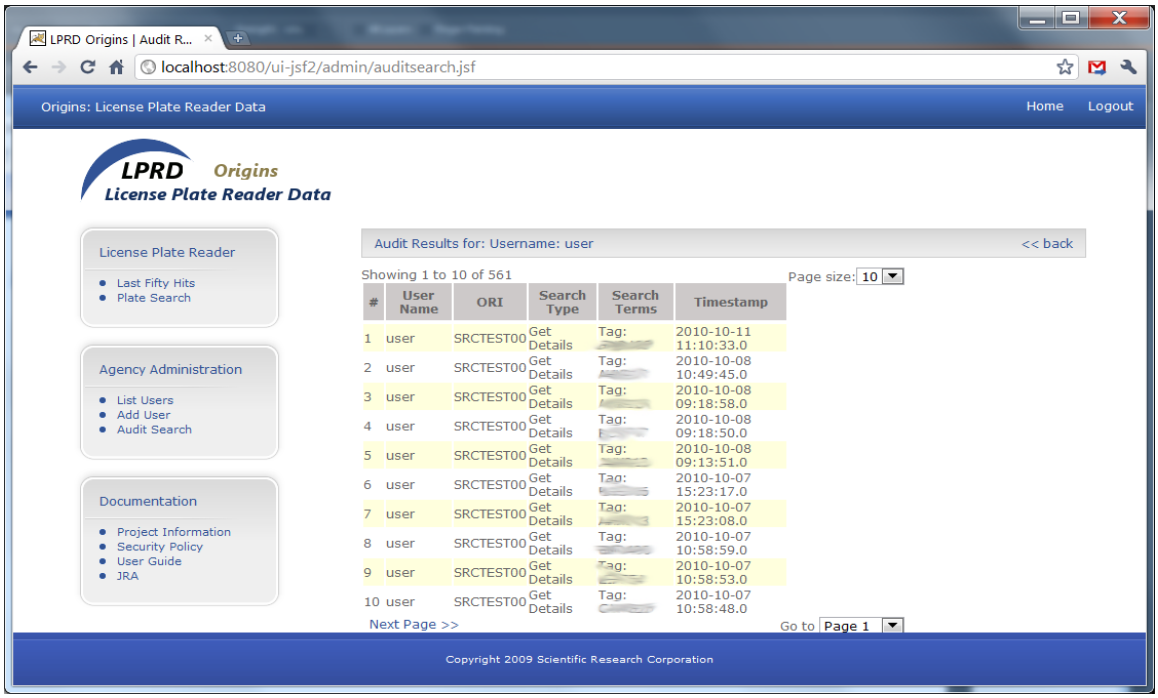
LPRD Origins | Audit R...
localhost:8080/ui-jsf2/admin/auditsearch.jsf
Origins: License Plate Reader Data
Home
Logout
LPRD Origins
License Plate Reader Data
License Plate Reader
Last Fifty Hits
Plate Search
Agency Administration
List Users
Add User
Audit Search
Documentation
Project Information
Security Policy
User Guide
JRA
Audit Results for: Username: user
<< back
Showing 1 to 10 of 561
Page size: 10
| User Name | ORI | Search Type | Search Terms | Timestamp
1 user SRCTEST00 Get Details Tag: 2010-10-11 11:10:33.0
2 user SRCTEST00 Get Details Tag: 2010-10-08 10:49:45.0
3 user SRCTEST00 Get Details Tag: 2010-10-08 09:18:58.0
4 user SRCTEST00 Get Details Tag: 2010-10-08 09:18:50.0
5 user SRCTEST00 Get Details Tag: 2010-10-08 09:13:51.0
6 user SRCTEST00 Get Details Tag: 2010-10-07 15:23:17.0
7 user SRCTEST00 Get Details Tag: 2010-10-07 15:23:08.0
8 user SRCTEST00 Get Details Tag: 2010-10-07 10:58:59.0
9 user SRCTEST00 Get Details Tag: 2010-10-07 10:58:53.0
10 user SRCTEST00 Get Details Tag: 2010-10-07 10:58:48.0
Next Page >>
Go to Page 1
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Figure 7-2. LPRD Audit Search Results Screen

The Agency Administrator has the ability to narrow the search spectrum by date/s by using the After and Before this date text boxes (*see* Plate Search section above).

They can also narrow the search by searching for a single or many specific search items by entering them in the Search Terms text boxes.

For example, if the user searched for tag 123ABC, but not all of this information was known, the administrator could enter '12,C' in the Search Terms text box and click **SUBMIT**. This would return all searches performed by the user for tags containing 12 and C.

V. System Administration Functions

In addition to performing queries, a system administrator can create and manage agency user and organization accounts. They can add, edit, and delete user and organization accounts. Plus they can list users.

Logging In

1. Click the Login link in upper right corner of the Home Screen to bring up the Login Screen (*see* Figure 8-1), begin typing your Administrator username and password.

Note: When logging in as a system administrator, the ORI field is left blank.
*Note: Passwords **are** case sensitive. Usernames are not case sensitive.*

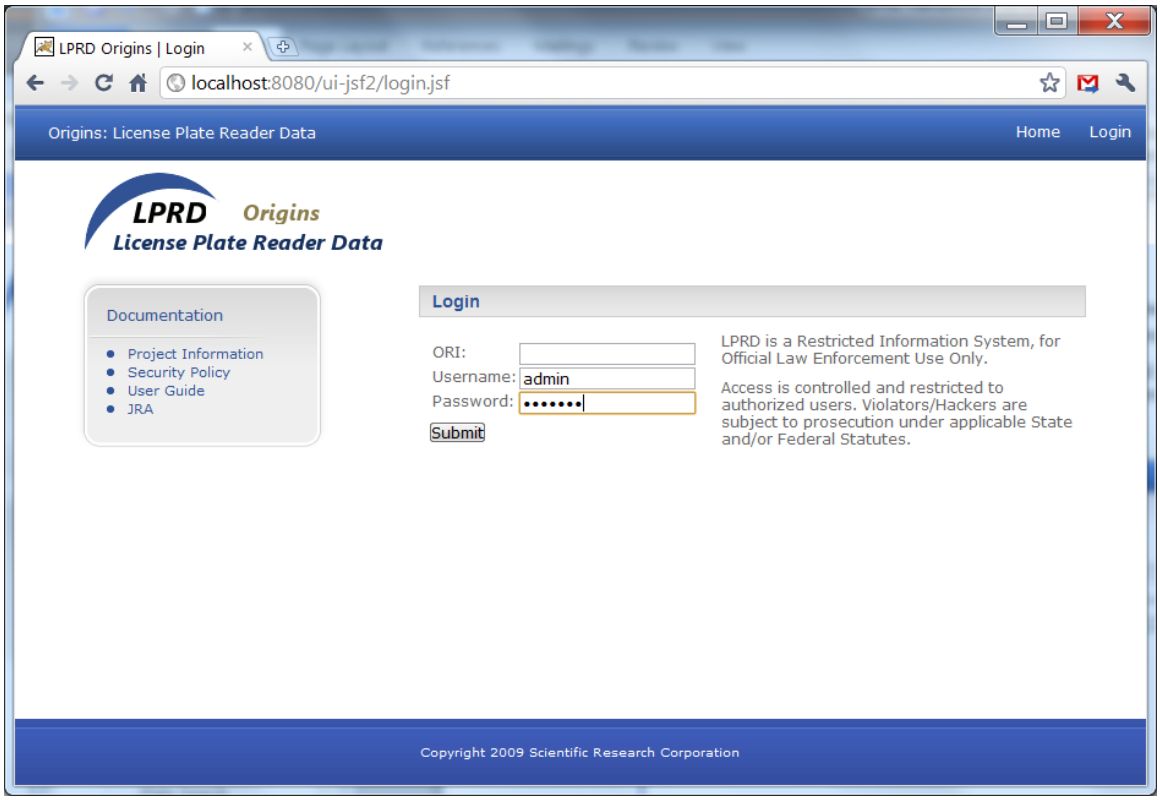
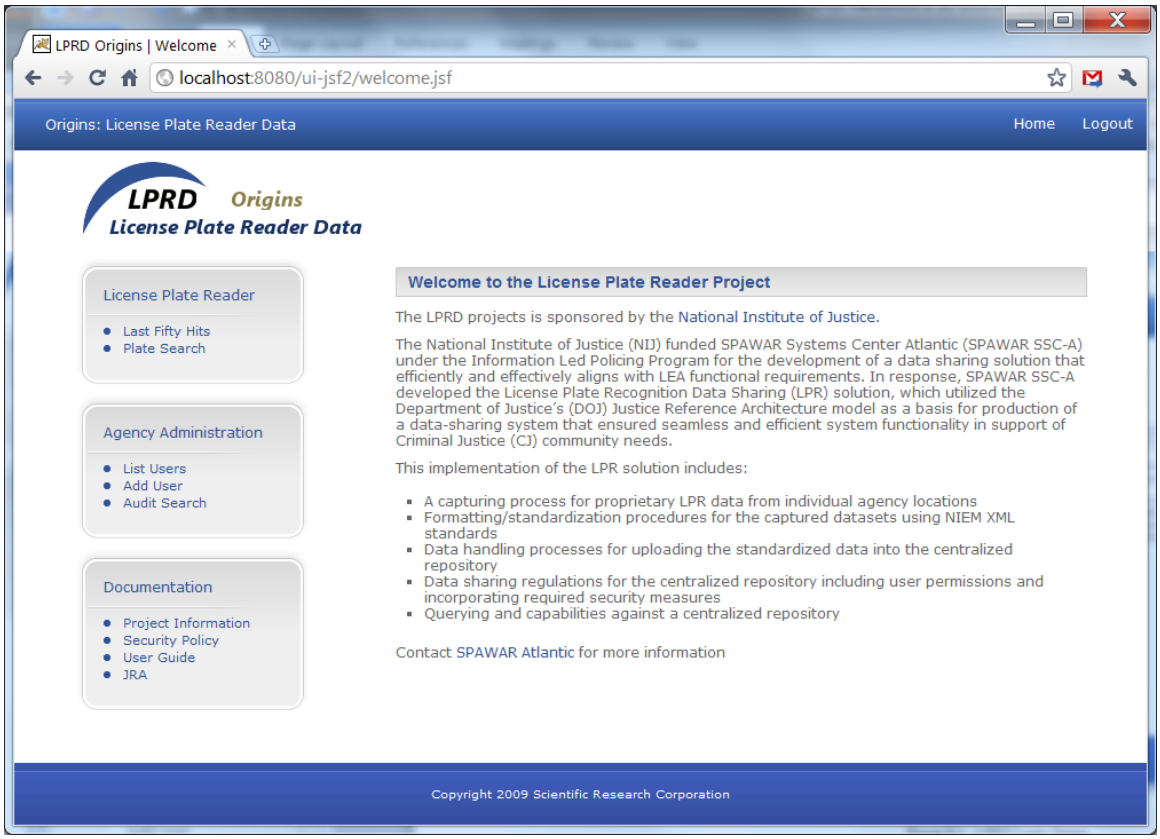


Figure 8-1. LPRD Login Screen

2. Click **SUBMIT** to log into the LPRD system. The username and password will then be validated against the authentication mechanism.
3. After logging in, the LPRD welcome Administrator screen appears (*see* Figure 8-2).


LPRD Origins | Welcome
localhost:8080/ui-jsf2/welcome.jsf
Origins: License Plate Reader Data
Home
Logout
LPRD
Origins
License Plate Reader Data
License Plate Reader
Last Fifty Hits
Plate Search
Agency Administration
List Users
Add User
Audit Search
Documentation
Project Information
Security Policy
User Guide
JRA
Welcome to the License Plate Reader Project
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This implementation of the LPR solution includes:
A capturing process for proprietary LPR data from individual agency locations
Formatting/standardization procedures for the captured datasets using NIEM XML standards
Data handling processes for uploading the standardized data into the centralized repository
Data sharing regulations for the centralized repository including user permissions and incorporating required security measures
Querying and capabilities against a centralized repository
Contact SPAWAR Atlantic for more information
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Figure 8-2. LPRD Admin Welcome Screen

List Users

To view a list of an organization's users, click the **List Users** link on the left side of the screen under System Administration menu box to access the List Users page (*see* Figure 8-3).

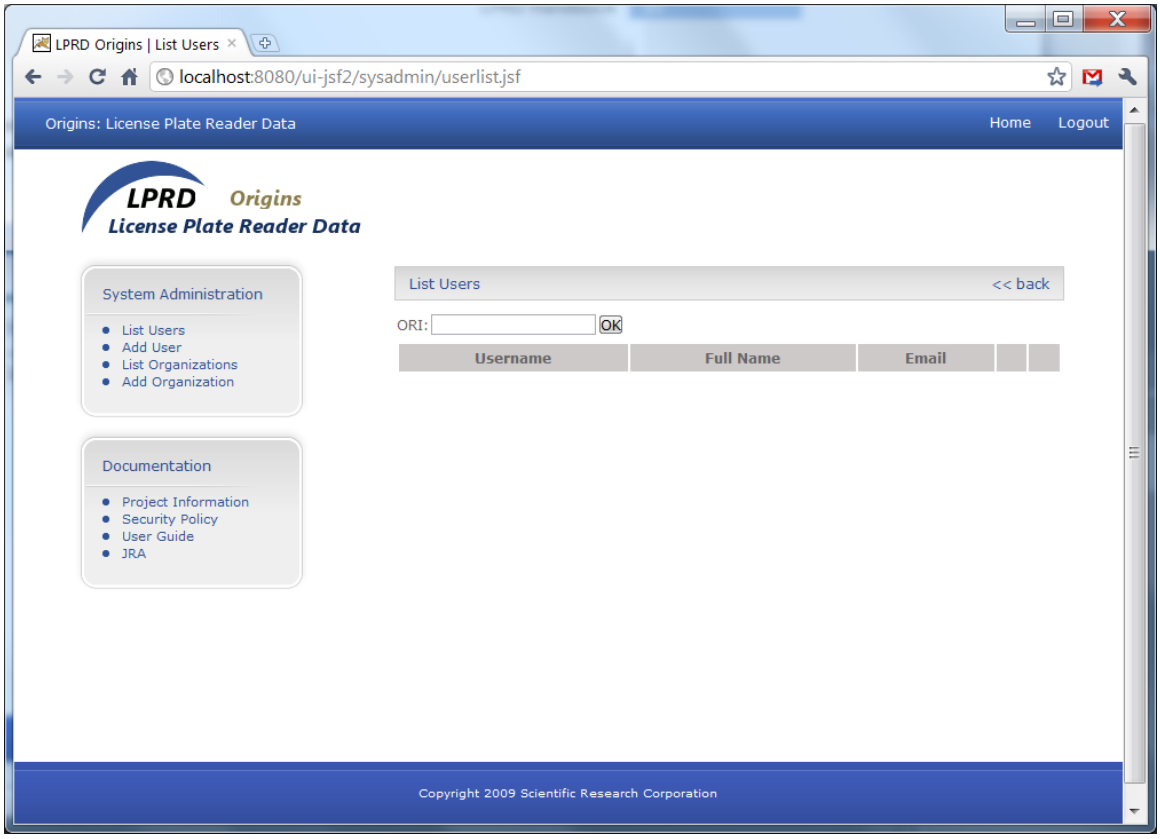

Figure 8-3. LPRD List Users Screen

Type the ORI of the organization whose users you would like to view in the ORI text box, and the users will display (*see* Figure 8-4).

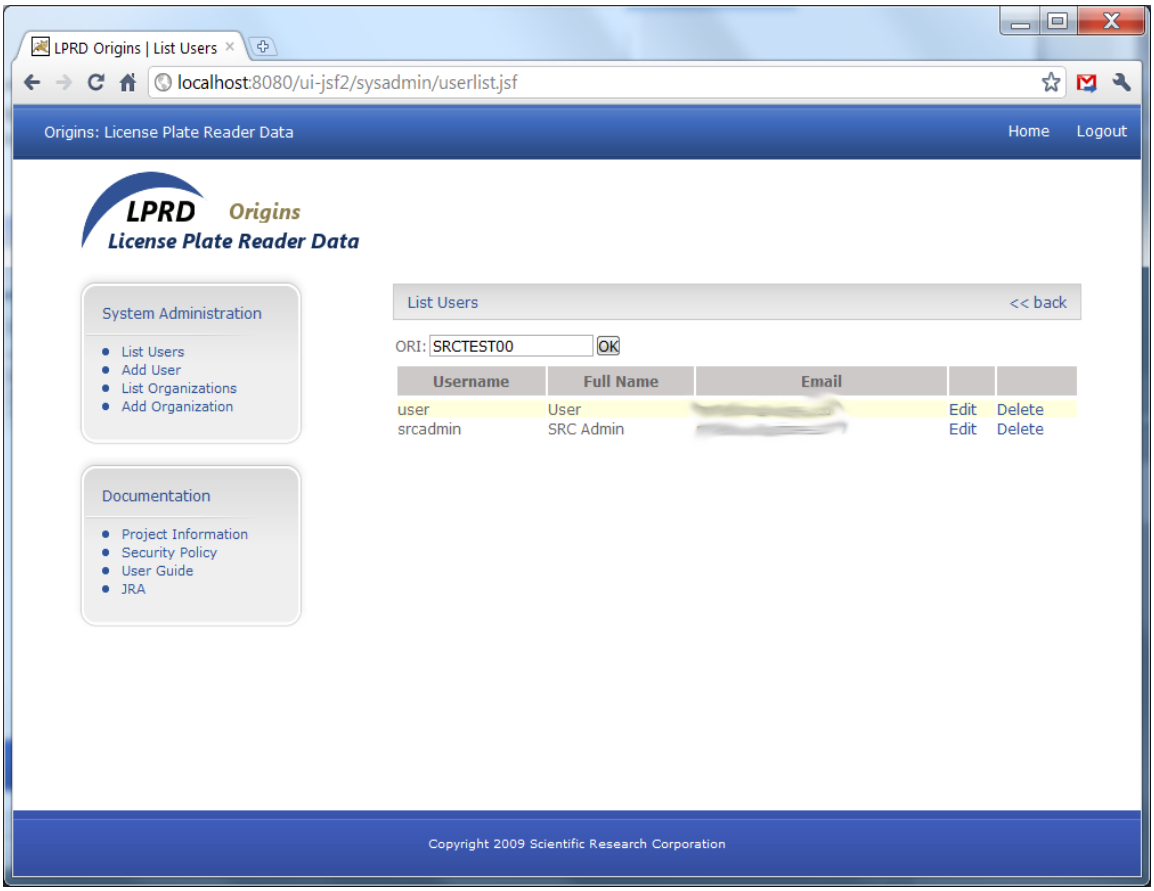

Figure 8-4. LPRD List Users Screen

Add User

1. To add a user, click the **Add User** link on the left side of the page under System Administration menu box to access the Add User page (*see* Figure 9-1).

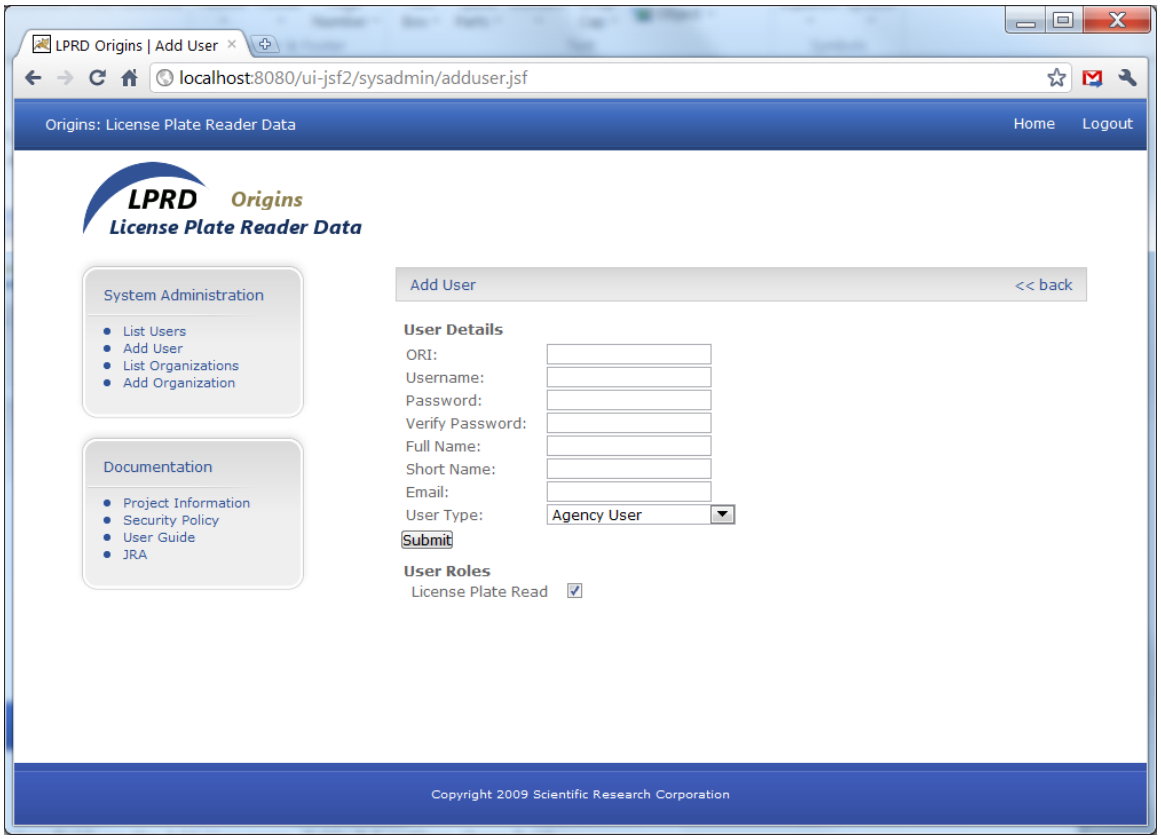

Figure 9-1. Add User Page

2. Complete the below fields on the Add User page. Table 9-1 outlines these fields.

Table 9-1. Add User Page Fields

FIELD	DESCRIPTION/OPTIONS
ORI	Enter the ORI where the new user will be assigned.
Username	Enter the username for the new user. Usernames may not contain a space at the beginning or end of the string, a special character (i.e. # % &), or any of the following characters: , ; ‘ “ + \ < >
Password	Assign a password for the username. Passwords must contain at least eight characters, including an upper and lower case alphabetical character, a number, and a special character (i.e. @ # *). Passwords are case sensitive.

Table 9-1. Add User Page Fields

FIELD	DESCRIPTION/OPTIONS
Confirm Password	Retype the password entered in the Password field. Remember, passwords are case sensitive.
Full Name	Enter the user's first, middle, and last name.
Short Name	Enter the user's short name.
Email	Enter the user's email address.
User Type	• Select the appropriate user type by clicking on the drop down box. • Agency User – This user has query and limited administration privileges (change password). This value is selected by default. • Agency Administrator – • System Administrator –

3. Click **SUBMIT** to save the new user account.

Edit User

1. Click List Users then click the Edit link to the right of the user's information to display the Edit User screen (see Figure 9-2).

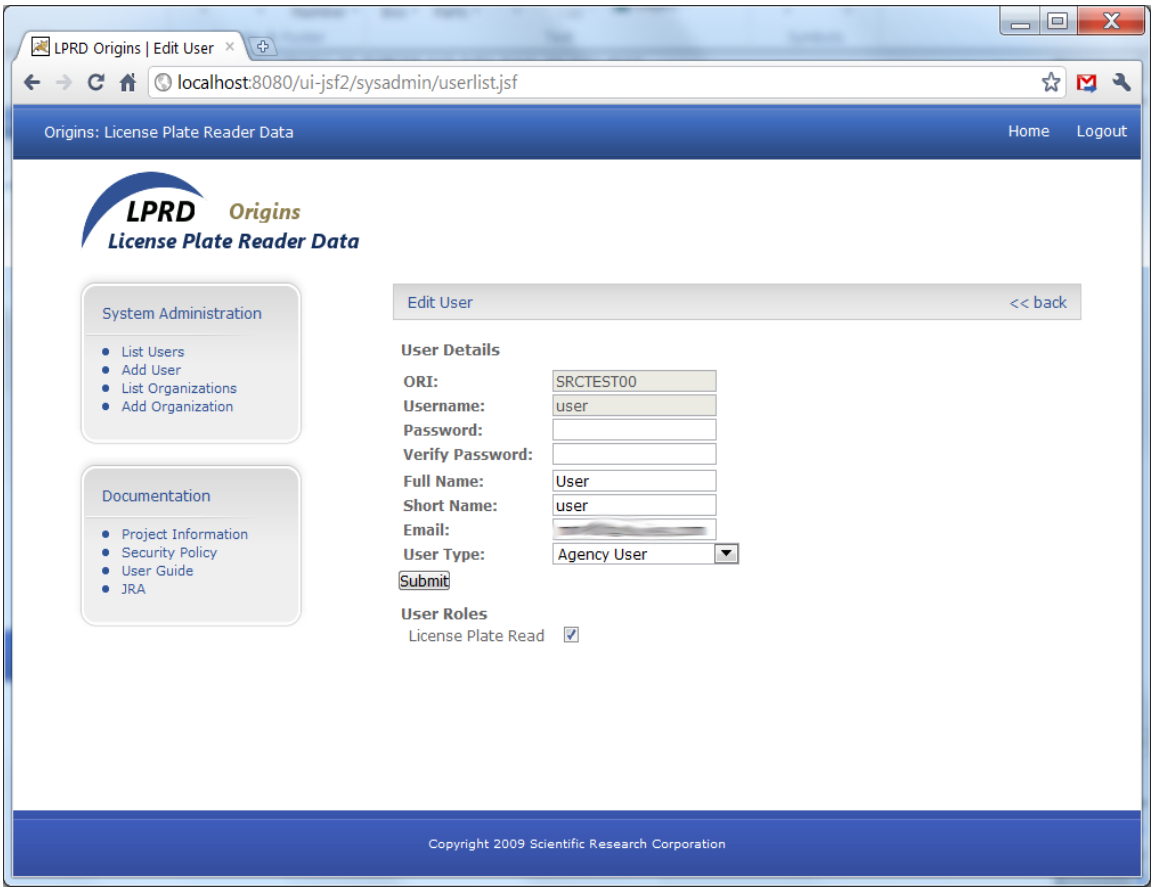

Figure 9-2. LPRD Edit Users Screen

2. The administrator can edit a user's Password, Full Name, Short Name, Email, or User Type. The administrator can also assign or unassign access to any of the available modules by clicking the check box to the right of the module name.
3. Click Submit to change user information as indicated.

Delete User

1. Click the Delete link to the right of the user's information to delete a user.

List Organizations

To view a list of LPRD's organizational users, click the **List Organizations** link in the System Administration menu box. This will bring up the Organization page (*see* Figure 10-1).

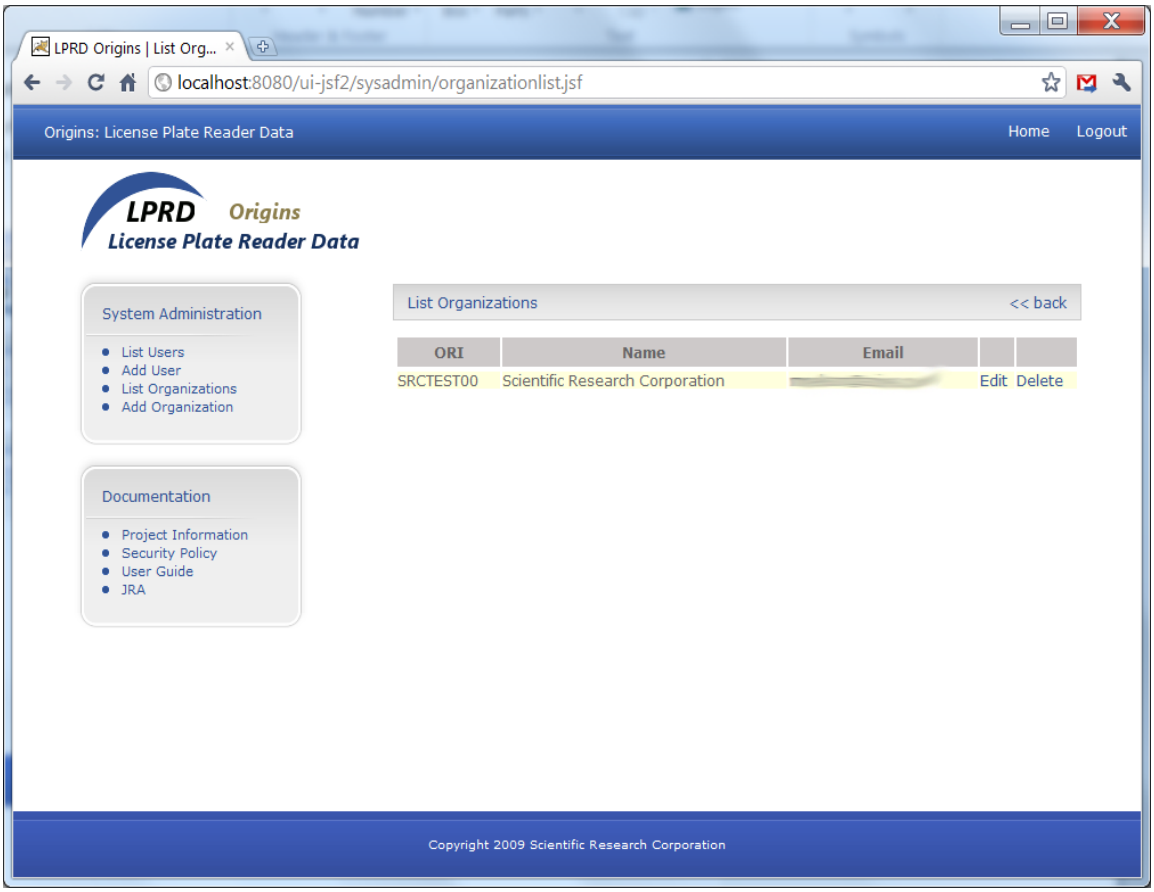

Figure 10-1. LPRD List Organizations Screen

Organizations will be listed on separate lines listing their ORI, Organization Name, and Email Address.

Add Organizations

1. To add an organization, click the **Add Organization** link on the left side of the page under the System Administration menu box. This will bring up the Add Organization screen (*see* Figure 11-1).

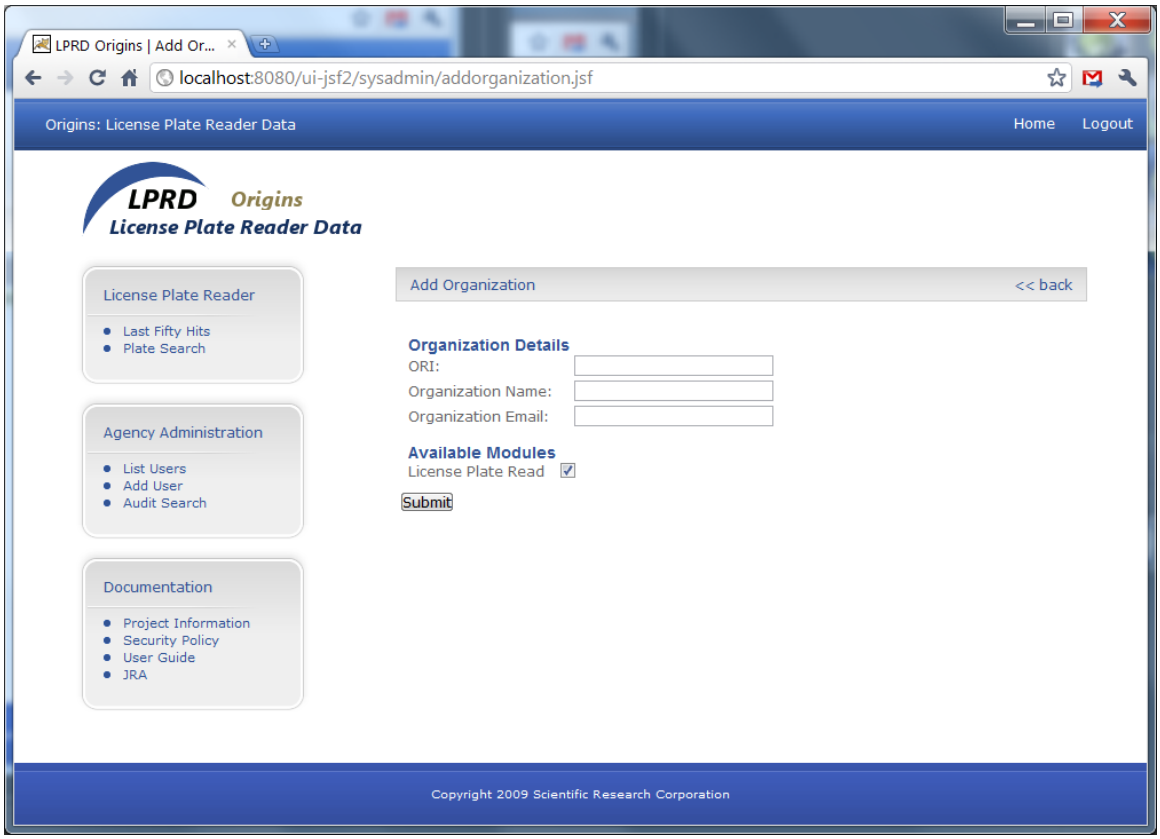

Figure 11-1. LPRD Add Organization Screen

2. Complete the below fields on the Add Organization page. Table 11-1 outlines these fields.

Table 11-1. Add Organization Page Fields

FIELD	DESCRIPTION/OPTIONS
ORI	Enter the ORI for the new organization. ORI's may not contain a space at the beginning or end of the string, a special character (i.e. # % &), or any of the following characters: , ; ' " + \ < >.
Organization Name	• Enter the Organization Name for the new organization. Organization Name's may not contain a space at the beginning or end of the string, a special character (i.e. # % &), or any of the following characters: , ; ' " + \ < >.

Table 11-1. Add Organization Page Fields

FIELD	DESCRIPTION/OPTIONS
Organization Email	Enter the Email Address for the new organization.
Available Modules	Click in each radio box that the new organization will have access to.

3. Click **SUBMIT** to add the organization.

Edit Organization

1. To edit an organization account, click List Organizations then click on the **EDIT** link in the far right column. The Edit link will direct users to the Edit Organization screen (*see* Figure 11-2).
2. The administrator can edit an Organization Name or Organization Email. The administrator also can assign access to any of the available modules by clicking the check box to the right of the module name.

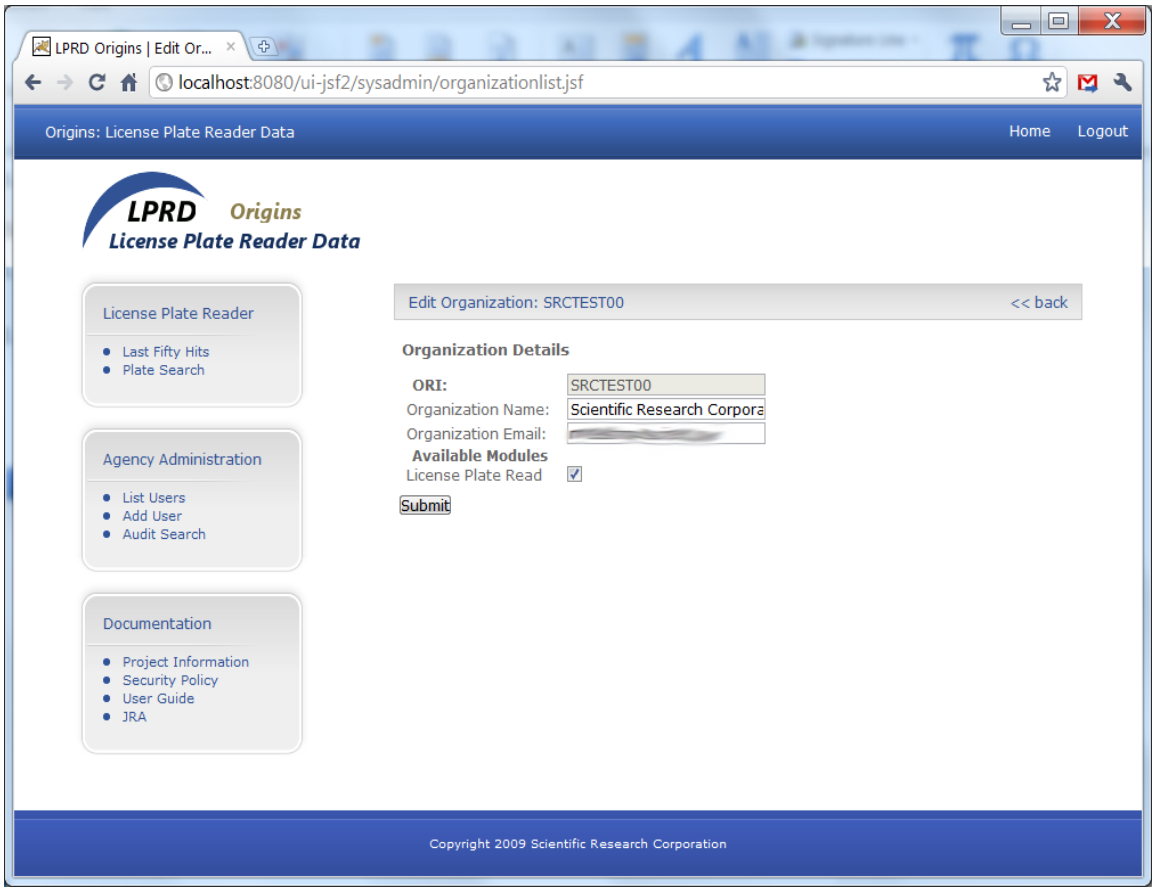

Figure 11-2. LPRD Edit Organization Screen

3. Click **SUBMIT** to save changes.

Delete Organization

1. Click the **DELETE** link to the right of the organization's information to delete an organization

Appendix A - LPRD MOU Template

MEMORANDUM OF UNDERSTANDING

Between
(HOST AGENCY)
And
[PROPOSED AGENCY]

Background

[Name of Host Agency Project] [License Plate Recognition Data sharing (LPRD)] is an initiative of the [Host Agency] to create an information sharing system designed to replicate, maintain, and share law enforcement license plate reader systems from all participating state and local public safety agencies within the [State of Name or region of Name].

Concept

The goal of this project is to share license plate recognition data among all contributing agencies that have established this MOU with [Host Agency System]. Participating agencies will share license plate reader (LPR) information for replication to the data warehouse or as part of a central querying system hosted by [Hosting Agency System] and will have the capability to query all LPR based information from around the [State or Region] which is stored within the warehouse.

Purpose

This Memorandum of Understanding (MOU) sets forth an agreement between and defines the roles and responsibilities of [Host Agency] and the [Proposed Agency], in implementing connectivity to [Host Agency System].

Responsibilities

[HOST AGENCY]

The roles and responsibilities of [Host Agency] in this MOU are as follows:

- Host Agency will establish the [Name of the Host Agency System] as a shared information system to the benefit of all public safety agencies in the [State or region of xxxx].

- The [Host Agency] will appoint a project manager to oversee [Name of Host Agency project] and implement the terms and conditions of this MOU.

- [Hosting Agency] will direct the management of all obligations, responsibilities, and assets of [Name of Host Agency System], including but not limited to:

    - Any and all contractual obligations for development, implementation, expansion, maintenance, and management of [Name of Host Agency System],

    - Ownership of any and all equipment in the inventory of [Name of Host Agency System], including but not limited to servers, workstations, communications devices, routers, firewalls or other hardware, and all software in use or under development in compliance with the requirements of [Name of Host Agency System].

    - Security and control of any data resident in [Name of Host Agency System] data warehouse, to exclusive Law Enforcement use as defined by [Name of Host Agency System] Security Policies and Procedures.

- [Host Agency] will design and implement a governance structure appropriate to the proper operational maintenance of [Host Agency], and providing appropriate levels of input to all participating agencies.

- Host Agency will adopt Security Policies and Procedures as may be consistent with appropriate security and maintenance of the system for all participating agencies. This document shall become the governing MOU for participation in [Host Agency System] upon ratification of the participating agencies.

- [Host Agency] will ensure that appropriate personnel are made available as reasonably necessary to assist with development, implementation, and testing of any hardware / software solutions, as well as for any training required, for the purposes of this project.

- Host Agency will assist in obtaining the cooperation of any third party contractor or vendor approved by them to provide license plate reader systems in [Name of State or Region] and / or internal or external technology providers (e.g. [State/Region] CIO / Other [State/County/City] Agencies / [Host Agency] information technology staff) as may be reasonably necessary for the purposes of this project.

- [Host Agency] will assist in creation of the lessons learned and final reporting and documentation of the project. The input provided by the host agency will be utilized for future distributions and use of the system at other hosting agencies.

[PROPOSED AGENCY]

The roles and responsibilities of the [Proposed Agency] in this MOU are as follows:

- The [Proposed Agency] maintains sole authority and responsibility for determining the actions, if any, that are appropriate for the department's information technology environment, and for implementing any changes deemed to be appropriate to the purposes of this project.

- The Chief Executive Officer of the [Proposed Agency], or an appropriate designee, will be available, as reasonably required, to give guidance and approval to technical and non-technical requirements of this assistance project.

- The Chief Executive Officer of the [Proposed Agency] will adopt [Name of Host Agency System] Security Policies and Procedures document, which is the governing MOU for participation in [Name of Host Agency System], and agrees to remain in compliance with the requirements, policies, and practices as outlined therein for the duration of the [Proposed Agency]'s participation in [Name of Host Agency System].

- The Chief Executive Officer of the [Proposed Agency] will appoint a representative as the agency's (Name of Host Agency System) Project Manager who will be responsible for the overall coordination of the project on behalf of the department.

- The [Proposed Agency] will make reasonable accommodations for access by [Host Agency] staff to their facilities and license plate reader system as may be required in furtherance of this project.

- The [Proposed Agency] will ensure that appropriate personnel are made available as reasonably necessary to assist with development, implementation, and testing of any hardware / software solutions, as well as for any training required, for the purposes of this project.

- The [Proposed Agency] will assist in obtaining the assistance of any third party contractor or vendor associated with their license plate reader system and / or internal or external technology providers (e.g. county / municipal information technology staff) as may be reasonably necessary for the purposes of this project.

- [Proposed Agency] will assist in creation of the lessons learned and final report of the project.

[ALL AGENCIES]

The roles and responsibilities of all agencies in this MOU are as follows:

- All contributing agencies shall develop and maintain an LPR data usage policy that addresses privacy concerns. Such usage policy may be derived from the International Association of Chiefs of Police publications pertaining to license plate readers.

- The ownership of the data that is contributed in this system shall remain with the contributing agency. Therefore, all ownership rights are to the sole authority and responsibility of the contributing agency. The data in this system is shared by the contributing agency, for the communal use by other law enforcement and government agencies that have this signed agreement with [Host Agency], but shall adhere to the contributing agency's usage policy when using the contributing agency's data. All data

use and handling shall comply with the current laws and statutes with respect to the data.

- The [Host Agency] shall develop and maintain an LPR data retention policy that can addresses privacy concerns in accordance with current federal and state legislation and statutes, and may be limited by system capability. All contributing agencies shall adhere to the data retention policy until such time that The [Proposed Agency] has developed their own policy. At that time, the [Proposed Agency] may submit a memorandum to this MOU to address the retention of the data owned by The [Proposed Agency]. Such data retention policy may be derived from the International Association of Chiefs of Police publications pertaining to license plate readers.

Funding

Any costs associated with maintenance, upgrade, or changes required directly to the contributing agency's LPR system or existing computer network in order to accommodate implementation of [Name of Host Agency System] interfaces and replication, or costs incurred on behalf of [Name of Host Agency System] as a result of changes to the agency system(s) which adversely affect [Name of Host Agency System] replication, may be the responsibility of the [Proposed Agency].

Acknowledgement

[Host Agency] anticipates the duration of this implementation to be twelve (12) calendar months, but may be extended at the discretion of the Director of [Host Agency] if requested by the [Proposed Agency]. Such extension must be documented through appropriate addendum to this MOU agreeable to both parties.

This Memorandum of Understanding will be effective upon signature of all parties.

_____ Date: _____

Name (Print and Signature)

Title

[Proposed Agency]

«City», State

_____ Date: _____

Name (Print and Signature)

Title

[Host Agency]

City, State

Date: _____ Date: _____